

Attachment 1

CALIFORNIA ENVIRONMENTAL QUALITY ACT FINDINGS AND STATEMENT OF OVERRIDING CONSIDERATIONS FOR THE DELTA PLAN AMENDMENTS

I. INTRODUCTION

The Delta Stewardship Council (“Council”), as lead agency under the California Environmental Quality Act (“CEQA”), Public Resources Code section 21000 *et seq.*, has prepared the Final Delta Plan Amendments Program Environmental Impact Report (State Clearinghouse No. 2017032048) (“PEIR”). The PEIR is a program-level EIR pursuant to section 15168 of the Guidelines for implementation of the California Environmental Quality Act (“State CEQA Guidelines”).¹ The PEIR consists of the November 2017 Draft Delta Plan Amendments Program EIR (“Draft PEIR”) and the April 2018 Final Delta Plan Amendments PEIR (“Final PEIR”).

In determining to approve the proposed Delta Plan Amendments and related regulations implementing the Delta Plan Amendments (“Project” or “amendments”), which are described in more detail in Section II, below), the Council makes and adopts the following findings of fact and statement of overriding considerations, and adopts and incorporates into the Project the mitigation measures identified in the PEIR, all based on substantial evidence in the whole record of this proceeding (“administrative record”). Pursuant to section 15090(a) of the State CEQA Guidelines, the PEIR was presented to the Council, and the Council reviewed and considered the information contained in the PEIR prior to making the findings in Sections IV to XIV below. The conclusions presented in these findings are based upon the PEIR and other evidence in the administrative record.

II. PROJECT DESCRIPTION

The Delta Plan is a comprehensive, long-term management plan for the Sacramento-San Joaquin Delta and the Suisun Marsh (collectively, “the Delta”) that furthers achievement of the coequal goals defined in the Sacramento-San Joaquin Delta Reform Act of 2009 (“Delta Reform Act”), Water Code (Wat. Code) section 85000 *et seq.* The coequal goals are: (1) to provide a more reliable water supply for California, and (2) to protect, restore, and enhance the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place. Wat. Code § 85054. The Delta Reform Act identifies types of plans, programs, and projects that are “covered actions” within the Council’s jurisdiction. State and local agencies must determine which actions subject to their approval constitute covered actions and must certify that those covered actions are consistent with the Delta Plan before they implement them.

In 2013, the Council adopted the Delta Plan following certification of the Final Program Environmental Impact Report for the Delta Plan (State Clearinghouse No. 2010122028) (“2013

¹ The State CEQA Guidelines are found at California Code of Regulations, title 14, section 15000 *et seq.*

PEIR”). The Council subsequently adopted an Addendum to the 2013 PEIR and amended Delta Plan recommendation WR R15 and California Code of Regulations, title 23, section 5001(dd)(3) regarding single-year water transfers in 2016. In 2016, the Council also adopted refinements to the Delta Plan output and outcome performance measures.

Several components of the Delta Plan require revisions due to prior commitments made in the Delta Plan adopted in 2013 and changes in circumstances and conditions in the Delta. The Delta Plan Amendments consist of three amendments to the Delta Plan, which are summarized below and described in detail in Section 3.4 of the Draft PEIR, as revised by as revised by the Revisions to Text of Proposed Delta Plan Amendments in **Final PEIR Appendix A, Sections 2 through 4 and as shown in Appendix A, Attachments A-1, A-3, A-4 and A-5:**

- ◆ Pursuant to Water Code sections 85305 and 85306, the first amendment concerns updated and new Delta Plan recommendations and regulations regarding strategic investment in Delta levees for the purposes of risk reduction, including repealing interim Delta Plan policy RR P1 and adopting new Delta Plan policy RR P1. These revisions are referred to as the Delta Levee Investment and Risk Reduction Strategy (“DLIS”) Amendment. The proposed DLIS Amendment identifies State interests in the Delta that are vulnerable to flooding; defines principles to guide the development and refinement of potential Delta Plan policies and recommendations; and evaluates risks to State interests due to potential levee failure. The DLIS Amendment consists of revisions and additions to policies and recommendations in Chapter 7 of the Delta Plan pertaining to the following: (1) continuing to prepare for Delta Flood emergencies; (2) modernizing levee information management; (3) prioritizing investment in Delta levees; (4) updating flood management funding strategies; (5) managing rural floodplains to avoid increased flood risk; (6) protecting and expanding floodways, floodplains, and bypasses; (7) renewing assurances of federal assistance for post disaster responses; and (8) limiting State Liability, all as described in Section 3.4.1 of the Draft PEIR, as revised by as revised by the Revisions to Text of Proposed Delta Plan Amendments in **Final PEIR Appendix A, Section 2 and as shown in Appendix A, Attachment A-1.**
- ◆ Pursuant to Water Code section 85304, the second amendment concerns the “promotion of options for new and improved infrastructure relating to Delta water conveyance, storage, and the operation of both to achieve the coequal goals.” This amendment is referred to as the Conveyance, Storage Systems, and the Operation of Both (“CSO”) Amendment and includes an amendment to WR R12. The CSO Amendment to Chapter 3 of the Delta Plan promotes options for design, implementation, and operation of the following to achieve the coequal goals: (1) new and improved water conveyance, (2) new and improved water storage, and (3) improved operations of storage and conveyance. The amendment incorporates best available science and implements adaptive management principles outlined in the Delta Plan. The options that are promoted consist of new and improved infrastructure related to water conveyance, new or improved conveyance or diversion facilities within and outside of the Delta, new or expanded surface water storage, new or expanded groundwater storage, and options for: operating storage and conveyance facilities, operating Delta water management facilities using adaptive management principles, and promoting water operations monitoring data management and data transparency, all as described in Section 3.4.2 of the Draft PEIR, as revised by

the Revisions to Text of Proposed Delta Plan Amendments in **Final PEIR Appendix A, Section 3 and as shown in Appendix A, Attachment A-3.**

- ◆ Pursuant to Water Code sections 85211 and 85308(b)-(d), the third amendment concerns revisions to the Delta Plan performance measures to enable the Council to track progress in meeting the objectives of the Delta Plan. The revisions consist of amendments to Appendix E of the Delta Plan to include revised output and outcome performance measures. The performance measures contain quantified or otherwise measurable targets to be used as indicators of whether the Delta Plan is meeting its objectives. These revisions are referred to as the Performance Measures (“PM”) Amendment. The PM amendment, as described in Section 3.4.3 of the Draft PEIR, as revised by as revised by the Revisions to Text of Proposed Delta Plan Amendments **in Final PEIR Appendix A, Section 4 and as shown in Appendix A, Attachment A-4** and the Revisions to Data Sheets for Refined Performance Measures in Final PEIR Appendix A, Attachment A-5, consists of revised performance measure targets, metrics, and baseline conditions associated with:
 - ◆ Providing a more reliable water supply for California—including topics such as urban water conservation, stormwater runoff, reduced reliance on Delta water supplies, agricultural and groundwater management, and timing of Delta exports.
 - ◆ Protecting, restoring and enhancing the Delta ecosystem—including topics such as natural functional flows and nonnative species.
 - ◆ Protecting and enhancing the unique cultural, recreational, natural resources, and agricultural values of the California Delta as an evolving place—including topics such as protection of Delta lands and communities, and Delta agriculture, recreation, and tourism.
 - ◆ Improving water quality to protect human health and the environment—including topics such as water quality standards and monitoring, algal blooms, and construction of the North Bay Aqueduct Alternate Intake Project to improve the quality and reliability of water supplies.
 - ◆ Reducing risks to people, property, and state interests in the Delta—including topics such as flood emergencies and risk reduction, community credit points, and the National Flood Insurance Program Community Rating System.

As set forth in Section 3.1 of the Draft PEIR as revised by Chapter 2 of the Final PEIR, the project objectives common to the Delta Plan are to further achieve the coequal goals and the eight ‘inherent’ objectives in a manner that:

1. Furthers the statewide policy to reduce reliance on the Sacramento-San Joaquin Delta (“Delta”) in meeting the state’s future water supply needs through regional self-reliance,
2. Is consistent with specific statutory content requirements for the Delta Plan (Wat. Code sections 85302(c) through (e), and 85303-85308),

3. Is implementable in a comprehensive, concurrent, and interrelated fashion, and
4. Is accomplished as rapidly as realistically possible without jeopardizing ultimate success.

The project objectives for each of the Delta Plan Amendments are set forth in Sections 3.1.1 (DLIS), 3.1.2 (CSO), and 3.1.3 (PM) of the Draft PEIR as revised by Chapter 2 of the Final PEIR.

The location of the Project is defined by the purposes and uses of the Delta Plan, which are described in the Delta Reform Act, and, for the purpose of this CEQA analysis, includes the area affected by the Project. This area consists of the Primary Planning Area and the Extended Planning Area. The Primary Planning Area shares the legal boundaries of the Delta and the Suisun Marsh as defined in Water Code Section 85058. The Extended Planning Area is defined by the watersheds that contribute flows to the Delta and the areas of California receiving water from or conveyed through the Delta. The Primary and Extended Planning Areas are defined in greater detail in Sections 3.3.1 and 3.3.2 of the PEIR.

The Project does not involve construction or operation of specific facilities or other specific physical actions by the Council. For purposes of ensuring a conservative analysis of environmental impacts in this PEIR, the PEIR assumes that the Delta Plan and the Project are implemented and achieve their desired outcomes, regardless of whether the outcomes are expressed as policies or recommendations. Accordingly, the PEIR evaluates the potential impacts of the types of projects that the Delta Plan, as amended by the Project, would encourage and promote in the Primary and Extended Planning Areas. Once proposals for specific projects consistent with the amendments are developed, their impacts will be more fully evaluated in future project-level CEQA documents by the lead agencies for the proposed projects.

The Council, as the CEQA lead agency, determined that a program EIR was the appropriate CEQA document for the proposed Project, and the PEIR was prepared in conformance with CEQA and the State CEQA Guidelines. The impact analysis in the PEIR addresses construction, constructed facilities, and operations activities. For covered actions constructed in the Primary and Extended Planning Areas in response to the amendments, other public agencies would be required to implement the 2013 PEIR mitigation measures or equally effective measures, if feasible, as required by Delta Plan policy GP 1 (Cal. Code of Regs., title 23, § 5002(b)(2)). The 2013 PEIR Mitigation Measures were adopted and incorporated into the Delta Plan in order to reduce or avoid the significant environmental impacts of the Delta Plan. Accordingly, the 2013 PEIR Mitigation Measures would continue to apply to covered actions that are not exempt from CEQA, as required by Delta Plan policy GP 1, and would be implemented as part of the Project.

III. ENVIRONMENTAL REVIEW PROCESS

On March 16, 2017, the Council filed a Notice of Preparation (“NOP”) of the PEIR with the State Clearinghouse in the Governor’s Office of Planning and Research and distributed copies of the NO to approximately 28 recipients by mail and 17 recipients through the State Clearinghouse. Over 3,600 agencies, tribes, organizations and individuals were informed by

mail or email of the availability of the Draft PEIR. The Council published the NOP for a 32-day comment period from March 16, 2017, to April 17, 2017. The Council held a public scoping meeting on March 24, 2017, to obtain the views of agencies and the public on the scope and content of the EIR prior to publishing the Draft PEIR. Oral comments were recorded at the scoping meeting and written comments were accepted by both mail and email. The Council submitted the Draft PEIR to the State Clearinghouse and issued it for public review and comment for 47 days beginning on November 1, 2017, and ending on December 18, 2017. The Council also extended the comment period to January 22, 2018, for a total comment period of 82 days. During that time, the Draft PEIR was available for review by state and local agencies and the public, including individuals and organizations. During the comment period on the Draft PEIR, the Council held two open houses, on November 1, 2017, and November 2, 2017, and a transcribed public hearing on December 14, 2017, for the purpose of taking comments on the Draft PEIR.

In addition, the Council requested a list of California Native American tribes from the Native American Heritage Commission and sent a notification by email to 113 contacts on May 15, 2017. On May 16, 2017, the Council mailed letters of notification to 78 contacts. In response to the notification letters, the United Auburn Indian Community (“UAIC”) and the Fernandeno Tataviam Band of Mission Indians requested consultation. Consultation by telephone was held with UAIC on July 14, 2017, and with the Fernandeno Tataviam Band of Mission Indians on July 18, 2017. Public open house announcements were sent to the Wilton Rancheria and Buena Vista Rancheria of Me-Wuk Indians at their request on October 11, 2017.

Agencies, organizations, and members of the public submitted approximately 535 comment letters and emails (including 492 form letters) containing written comments on the Draft PEIR, in addition to participating in the public hearing to take comments on the Draft EIR. Section 3 of the Final PEIR provides responses to written and oral comments received during the comment period on the Draft PEIR. The Draft PEIR, and the Final PEIR beginning on April 16, 2018, were made available on the Council’s website, in printed version for inspection at open houses and public hearings, on compact discs at the Council’s office and also at open houses and public hearings, and were proved to public libraries.

IV. FINDINGS

These findings summarize the environmental determinations of the PEIR about project impacts before and after mitigation and do not attempt to repeat the full analysis of each environmental impact contained in the PEIR. Instead, these findings provide a summary description of and basis for each impact in the PEIR, describe the mitigation measures identified in the 2013 PEIR that were previously adopted and incorporated into the Delta Plan, describe the applicable mitigation measures identified in the PEIR, and state the Council’s findings and rationale therefor on the significance of each impact with the adopted mitigation measures. A full explanation of these environmental findings and conclusions can be found in the PEIR, and these findings hereby incorporate by reference the discussion and analysis in the PEIR supporting the PEIR’s determinations regarding mitigation measures and the Project’s impacts.

In referring to the previously adopted 2013 PEIR mitigation measures and adopting new mitigation, as set forth below, the Council intends to refer to each of the previously adopted 2013

PEIR mitigation measures and to adopt new mitigation measures identified in the certified PEIR. Accordingly, in the event a mitigation measure identified in the certified PEIR has inadvertently been omitted from these findings, such mitigation measure is hereby referred to, adopted, and incorporated in the findings below by reference. In addition, in the event the language of a mitigation measure set forth below fails to accurately reflect the mitigation measure in the certified PEIR due to a clerical error, the language of the mitigation measure as set forth in the certified PEIR shall control unless the language of the mitigation measure has been specifically and expressly modified by these findings.

Sections V through VIII, below, provide brief descriptions of the impacts that the PEIR identifies as either significant and unavoidable or less than significant, including cumulative and growth inducing impacts, and describe any mitigation measures identified in the PEIR for each significant impact.

V. SIGNIFICANT AND UNAVOIDABLE ADVERSE IMPACTS AND DISPOSITION OF RELATED MITIGATION MEASURES

The PEIR identifies the following significant and unavoidable adverse impacts associated with the approval of the Delta Plan Amendments, some of which can be reduced, although not to a less-than-significant level, through implementation of mitigation measures identified in the PEIR. Pub. Resources Code §21081(a)(1). It is hereby determined that these significant and unavoidable adverse impacts are acceptable for the reasons specified in Section X, below. Pub. Resources Code §21081(a)(3). As explained in Section XI, below, the findings in this Section are based on the PEIR, the discussion and analysis in which is hereby incorporated in full by this reference.

A. Impact 5.2-1. Implementation of projects by other public agencies in response to the proposed amendments could result in substantial degradation of visual qualities.

The PEIR finds that the Delta Plan Amendments could cause substantial degradation of visual qualities, including significant temporary, long-term, or permanent adverse effects on the visual qualities and character of the surrounding landscape in the Primary Planning Area (including rural and agricultural landscape in the Delta) and of the visual qualities and character of the surrounding landscape in the Extended Planning Area. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 8-1, set forth below, which was previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. This mitigation measure would minimize degradation of visual quality due to actions taken by other

public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 8-1 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 8-1: *Implementation of projects by other public agencies in response to the proposed amendments could result in substantial degradation of visual qualities.*

- ◆ *Use compatible colors for proposed structural features, such as intakes, pumping plants, and surge towers. Use earth tone paints and stains with low levels of reflectivity.*
- ◆ *Minimize the vertical profile of proposed structures as much as possible. Where possible, use subgrades for floors of structures. Use landscaped berms instead of walls to mask views of structures from high-visibility sites. Use green roof design where roof structures would be highly visible.*
- ◆ *Use vegetation plantings on proposed facility walls, such as climbing plants, espaliers, and other forms that soften the appearance of structures.*
- ◆ *Develop a landscaping plan for all proposed structures. Provide vegetative screening to soften views of structures. Landscaping should complement the surrounding landscape.*
- ◆ *Round the tops and bottoms of spoil disposal areas, and contour the faces of slopes to create more natural-looking landforms. Create visual diversity by planting vegetation with diverse growth forms on the spoil disposal areas; plant with more than just grasses.*
- ◆ *Landscape parking areas at proposed facilities, and include low-impact design features, such as permeable pavers, tree basins, and bioswales, that reduce stormwater runoff and enhance visual quality.*
- ◆ *Conduct only partial vegetative clearing of the limits of construction rather than clear the entire area; partial clearing would leave islands of vegetation and result in a more natural look. Use irregular clearing shapes with feathered edges instead of hard edges to promote a more natural effect.*
- ◆ *Develop design form and materials with a goal to achieve aesthetic visual character instead of a strictly utilitarian objective. Use cast natural form elements or natural materials for facing to achieve texture and color compatible with the adjacent landscape; natural materials would be preferable for areas of high visibility and public use. Landscape areas adjacent to facilities. Use natural materials, such as wood and stone, for signage at proposed facilities.*
- ◆ *Develop aesthetically pleasing landscaping for relocated roads at the shoulders, intersections, and on- and off- ramps from highways. Design turnouts and scenic vista points where appropriate for relocated roads with high visibility and high public use.*
- ◆ *To the extent consistent with the safety and reliability of the electric grid, as well as site-specific considerations, use single-pole electrical transmission towers instead of lattice-form towers for proposed large electrical transmission lines, and put transmission lines underground along areas with high visibility and high public use.*

- ♦ *Consider developing aesthetically well-designed visitor centers, vantage areas, or observation decks at appropriate facilities with interpretation features, walking paths, and other features. Although developing visitor centers would not reduce a visual impact, it would have the effect of making the facilities features of interest to the touring public.*

B. Impact 5.2-2. Implementation of projects by other public agencies in response to the proposed amendments could result in substantial adverse effects on scenic vistas and scenic resources.

The PEIR finds that the Delta Plan Amendments could cause significant temporary, long-term, or permanent adverse changes to scenic vistas that are visible from designated scenic roads and highways in the Primary Planning Area (because views from roads and highways are typically broad and expansive over the relatively flat topography of the Delta) and to scenic vistas that are visible from designated scenic roads and highways in the Extended Planning Area. These impacts are likely to be caused primarily by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both, and actions taken to implement the performance measures. Activities by other public agencies in response to the DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 8-2, set forth below, which was previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. This mitigation measure would minimize adverse effects on scenic vistas and scenic resources due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 8-2 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 8-2: *Implementation of projects by other public agencies in response to the proposed amendments could result in substantial adverse effects on scenic vistas and scenic resources.*

- ♦ *Implement elements of Mitigation Measure 8-1 for temporary construction activities and new facilities that are visible from scenic vistas and designated roads and highways as appropriate.*
- ♦ *Replace all scenic resources (e.g., large trees) that would be removed for the Proposed Project, when feasible. Identify compensatory mitigation for visual or aesthetic resources by providing improvements to areas with existing diminished scenic quality.*

C. Impact 5.2-3. Implementation of projects by other public agencies in response to the proposed amendments could result in new sources of substantial light or glare.

The PEIR finds that the Delta Plan Amendments could cause significant temporary, long-term, or permanent adverse effects from new sources of substantial light or glare in the Primary and Extended Planning Areas, particularly in rural areas where ambient light levels are low. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. The PEIR also finds that glare resulting from construction activities would be less than significant, but that some construction activities may require substantial lighting. Additionally, the PEIR finds that new facilities that include transmission and distribution lines that use specular (i.e., highly reflective) conductors may result in a new source of substantial glare. Activities by other public agencies in response to the DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 8-3, set forth below, which was previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. This mitigation measure would minimize impacts from new sources of lighting due to actions taken by other public agencies in response to the Delta Plan Amendments. Implementation of Mitigation Measure 5.2-1(CSO/PM), set forth below, which is hereby adopted and incorporated into the Project, would reduce significant glare impacts from transmission lines and distribution lines associated with actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that these mitigation measures would reduce significant impacts to a less-than-significant level in all cases. Further, the implementation and enforcement of Mitigation Measure 8-3 and Mitigation Measure 5.2-1, or equally effective mitigation measures, is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 8-3: *Implementation of projects by other public agencies in response to the proposed amendments could result in new sources of substantial light or glare.*

- ♦ *Use shields for proposed lighting facilities, and direct lighting downward and inward toward the facilities.*

Mitigation Measure 5.2-1 (CSO/PM): *Implementation of projects by other public agencies in response to the proposed amendments could result in new sources of substantial light or glare.*

- ♦ *Use non-specular conductor for transmission lines and distribution lines to reduce glare.*

D. Impact 5.3-1. Implementation of projects by other public agencies in response to the proposed amendments could result in conversion of Farmland to nonagricultural use or conflict with a Williamson Act contract or zoning for agricultural use.

The PEIR finds that the Delta Plan Amendments could cause significant temporary, long-term, or permanent conversion of Farmland and conflicts with Williamson Act contracts and agricultural zoning in the Primary Planning Area (where over fifty percent of the land is prime farmland, farmland of statewide importance, and unique farmland) and the Extended Planning Area. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measures 7-1 and 7-2, set forth below, which were previously adopted and incorporated into the Delta Plan, would apply to covered actions and are recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 7-1 would minimize conversion of Farmland to nonagricultural uses due to actions taken by other public agencies in response to the Delta Plan Amendments, and Mitigation Measure 7-2 would minimize conflicts with existing zoning for agricultural use or Williamson Act Contracts due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that Mitigation Measures 7-1 and 7-2 would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measures 7-1 and 7-2, or equally effective mitigation measures, is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 7-1: *Implementation of projects by other public agencies in response to the proposed amendments could convert Farmland to nonagricultural use or conflict with a Williamson Act Contract or zoning for agricultural use.*

- ◆ *Design proposed projects to minimize, to the greatest extent feasible, the loss of the highest valued agricultural land.*
- ◆ *For projects that will result in permanent conversion of Farmland, preserve in perpetuity other Farmland through acquisition of an agricultural conservation easement, or contributing funds to a land trust or other entity qualified to preserve Farmland in perpetuity (at a target ratio of 1:1, depending on the nature of the conversion and the characteristics of the Farmland to be converted, to compensate for permanent loss).*
- ◆ *Redesign project features to minimize fragmenting or isolating Farmland. Where a project involves acquiring land or easements, ensure that the remaining nonproject area is of a size sufficient to allow viable farming operations. The project proponents shall be*

responsible for acquiring easements, making lot line adjustments, and merging affected land parcels into units suitable for continued commercial agricultural management.

- ◆ *Reconnect utilities or infrastructure that serve agricultural uses if these are disturbed by project construction. If a project temporarily or permanently cuts off roadway access or removes utility lines, irrigation features, or other infrastructure, the project proponents shall be responsible for restoring access as necessary to ensure that economically viable farming operations are not interrupted.*
- ◆ *Manage project operations to minimize the introduction of invasive species or weeds that may affect agricultural production on adjacent agricultural land.*
- ◆ *Establish buffer areas between projects and adjacent agricultural land that are sufficient to protect and maintain land capability and agricultural operation flexibility. Design buffers to protect the feasibility of ongoing agricultural operations and reduce the effects of construction- or operation-related activities (including the potential to introduce special-status species in the agricultural areas) on adjacent or nearby properties. The buffer shall also serve to protect ecological restoration areas from noise, dust, and the application of agricultural chemicals. The width of the buffer shall be determined on a project-by-project basis to account for variations in prevailing winds, crop types, agricultural practices, ecological restoration, or infrastructure. Buffers can function as drainage swales, trails, roads, linear parkways, or other uses compatible with ongoing agricultural operations.*

2013 PEIR Mitigation Measure 7-2: *Implementation of projects by other public agencies in response to the proposed amendments could convert Farmland to nonagricultural use or conflict with a Williamson Act Contract or zoning for agricultural use.*

- ◆ *Design proposed projects to minimize, to the greatest extent feasible, conflicts and inconsistencies with land protected by agricultural zoning or a Williamson Act contract and the terms of the applicable zoning/contract.*

E. Impact 5.3-2. Implementation of projects by other public agencies could conflict with existing zoning for forestland, timberland, or timberland zoned Timberland Production or result in loss of forestland from conversion of land to nonforest use.

The PEIR finds that the Delta Plan Amendments could cause conversion of forestland to nonforest use in the Primary Planning Area (which contains over 14,000 acres of forestland, including stands of blue oak, coastal oak, and valley oak trees) with significant temporary, long-term, or permanent adverse effects on forestland. The Primary Planning Area does not contain any timberland or timberland zoned Timberland Production. The PEIR also finds that the Delta Plan Amendments could cause conversion of forestland, timberland, and timberland zoned Timberland Production to nonforest or nontimber uses in the Extended Planning Area, with temporary, long-term, or permanent adverse effects on forestland and timberland. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and

conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measures 7-3, 7-4, 4-1, 4-2, 4-3, and 4-4, set forth below, which were previously adopted and incorporated into the Delta Plan, would apply to covered actions and are recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 7-3 would minimize conflicts with existing zoning or cause rezoning of forestland or Timberland due to actions taken by other public agencies in response to the Delta Plan Amendments. Mitigation Measure 7-4 would minimize loss of Forestland or conversion of Forestland to nonforest use due to actions taken by other public agencies in response to the Delta Plan Amendments. Mitigation Measure 4-1 would minimize impacts to sensitive natural communities due to actions taken by other public agencies in response to the Delta Plan Amendments. Mitigation Measure 4-2 would minimize impacts to special-status species due to actions taken by other public agencies in response to the Delta Plan Amendments. Mitigation Measure 4-3 would minimize impacts to fish or wildlife species habitat due to actions taken by other public agencies in response to the Delta Plan Amendments. Mitigation Measure 4-4 would minimize impacts to migratory fish or wildlife movement due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that Mitigation Measures 7-3, 7-4, 4-1, 4-2, 4-3, and 4-4 would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measures 7-3, 7-4, 4-1, 4-2, 4-3, and 4-4, or equally effective mitigation measures, is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 7-3: *Implementation of projects by other public agencies could conflict with existing zoning for forestland, timberland, or timberland zoned Timberland Production or result in loss of forestland from conversion of land to nonforest use.*

- ◆ *Avoid land protected as forestland and timberland through site selection and/or project design. Where feasible, project proponents should take into account the value of the forest, not only in terms of direct products such as wood, but also as part of the watershed ecosystem, when selecting a project site. Wherever possible, nonprotected sites should be preferred and selected instead of protected sites.*

2013 PEIR Mitigation Measure 7-4: *Implementation of projects by other public agencies could conflict with existing zoning for forestland, timberland, or timberland zoned Timberland Production or result in loss of forestland from conversion of land to nonforest use.*

- ◆ *For projects that will result in permanent conversion of Forestland, preserve in perpetuity other forestland through a conservation easement or by acquiring lands or contributing funds to a land trust or other agency (at a target ratio of 1:1, depending on the nature of the conversion and the characteristics of the Forestland to be converted, to compensate for permanent loss).*

- ◆ *Avoid land protected as forestland and timberland through site selection and/or project design. Where feasible, project proponents should take into account the value of the forest, not only in terms of direct products such as wood, but also as part of the watershed ecosystem, when selecting a project site. When possible, unprotected sites should be preferred and selected instead of protected sites.*
- ◆ *When removal of existing forestland or timberlands is required as part of an action, proponents must acquire the property at fair market value.*

2013 PEIR Mitigation Measure 4-1: *Implementation of projects by other public agencies could conflict with existing zoning for forestland, timberland, or timberland zoned Timberland Production or result in loss of forestland from conversion of land to nonforest use.*

- ◆ *Avoid, minimize, and compensate for reduction in area and/or habitat quality of sensitive natural communities, including wetlands, by doing the following:*
 - *Selecting project site(s) that would avoid sensitive natural communities, including jurisdictional wetlands and other waters, vernal pools, alkali seasonal wetlands, riparian habitats, and inland dune scrub.*
 - *Designing, to the maximum extent practicable, project elements to avoid effects on sensitive natural communities.*
 - *Replacing, restoring, or enhancing on a “no net loss” basis (in accordance with U.S. Army Corps of Engineers (USACE) and State Water Resources Control Board (SWRCB) requirements), wetlands and other waters of the United States and waters of the State that would be removed, lost, and/or degraded.*
 - *Where impacts to sensitive natural communities other than waters of the United States or State are unavoidable, compensating for impacts by restoring and/or preserving in-kind sensitive natural communities on-site, or off-site at a nearby site, or by purchasing in-kind restoration or preservation credits from a mitigation bank that services the project site and that is approved by the appropriate agencies, in consultation with applicable regulatory agencies (at ratios that offset temporal loss of habitat value).*
- ◆ *Implement advanced mitigation planning for ecosystem restoration prior to construction.*
- ◆ *Implement construction best management practices, including:*
 - *Developing and implementing a Stormwater Pollution Prevention Plan (SWPPP).*
 - *Minimizing soil disturbance, erosion, and sediment runoff from project site.*
 - *Avoiding and minimizing contaminant spills.*
 - *Minimizing visual and noise disturbance from construction activities.*
 - *Conducting biological construction monitoring to ensure that implemented Best Management Practices (BMPs) are effective.*
- ◆ *Restore areas temporarily affected by construction activities, including:*
 - *Preparing restoration plan for temporary impacts sites for review by resource agencies.*
 - *Minimizing soil disturbance and stockpiling topsoil for later use in any areas to be*

graded.

- *Decompacting or amending soil if necessary before planting and use native species for revegetation.*
- *Restoring natural communities with similar or improved function from communities that were affected.*
- ♦ *If a project may result in conversion of oak woodlands, as identified in section 21083.4 of the Public Resources Code, one or more of the following mitigation measures shall be implemented:*
 - *Conserve oak woodlands, through the use of conservation easements.*
 - *Plant an appropriate number of trees, including maintaining plantings and replacing dead or diseased trees.*
 - *Contribute funds to the Oak Woodlands Conservation Fund, as established under subdivision (a) of section 1363 of the Fish and Game Code.*
- ♦ *An invasive species management plan shall be developed and implemented for any project whose construction or operation could lead to introduction or facilitation of invasive species establishment. The plan shall ensure that invasive plant species and populations are kept below preconstruction abundance and distribution levels. The plan shall be based on the best available science and developed in consultation with Department of Fish and Wildlife (DFW) and local experts, such as the University of California Extension, county agricultural commissioners, representatives of County Weed Management Areas (WMA), California Invasive Plant Council, and California Department of Food and Agriculture. The invasive species management plan will include the following elements:*
 - *Nonnative species eradication methods (if eradication is feasible)*
 - *Nonnative species management methods*
 - *Early detection methods*
 - *Notification requirements*
 - *Best management practices for pre-construction, construction, and post-construction periods*
 - *Monitoring, remedial actions, and reporting requirements*
 - *Provisions for updating the target species list over the lifetime of the project as new invasive species become potential threats to the integrity of the local ecosystems.*

2013 PEIR Mitigation Measure 4-2: *Implementation of projects by other public agencies could conflict with existing zoning for forestland, timberland, or timberland zoned Timberland Production or result in loss of forestland from conversion of land to nonforest use.*

- ◆ *Select project site(s) that would avoid habitats of special-status species (which may include foraging, sheltering, migration and rearing habitat in addition to breeding or spawning habitat), and to the maximum extent practicable, (re)design project elements to avoid effects on such species.*
- ◆ *Schedule construction to avoid special-status species' breeding, spawning, or migration locations during the seasons or active periods that these activities occur.*
- ◆ *Conduct preconstruction surveys (by a qualified biologist) for special-status species in accordance with U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS) and DFW survey methodologies and appropriate timing to determine presence and locations of any special-status species and their habitat, and avoid, minimize, or compensate for impacts to special-status species in coordination with DFW and USFWS or NMFS.*
- ◆ *Establish buffers around special-status species habitats to exclude effects of construction activities. The size of the buffer shall be in accordance with USFWS and DFW protocols for the applicable special-status species. If nest tree removal is necessary, remove the tree only after the nest is no longer active, as determined by a qualified biologist.*
- ◆ *Conduct construction monitoring (by qualified biologist) to ensure effectiveness of avoidance and minimization measures and implement remedial measures if necessary.*
- ◆ *When appropriate, relocate special-status plant and animal species or their habitats from project sites following USFWS, NMFS, and DFW protocols (e.g., for special-status plant species or elderberry shrubs).*
- ◆ *Where impacts to special-status species are unavoidable, compensate for impacts by restoring or preserving in-kind suitable habitat on-site, or off-site, or by purchasing restoration or preservation credits (in compliance with the California Endangered Species Act (CESA) and federal Endangered Species Act (ESA)) for affected State- or federally-listed species from a mitigation bank that serves the project site and that is approved by the appropriate agencies, in consultation with the appropriate regulatory agencies (at ratios that offset the temporary loss of habitat value).*

2013 PEIR Mitigation Measure 4-3: *Implementation of projects by other public agencies could conflict with existing zoning for forestland, timberland, or timberland zoned Timberland Production or result in loss of forestland from conversion of land to nonforest use.*

- ◆ *Select project site(s) that would avoid a substantial reduction in fish and wildlife species habitat.*
- ◆ *To the maximum extent practicable, design project elements to avoid effects that would lead to a substantial loss of fish and wildlife habitat.*
- ◆ *Replace, restore, or enhance habitats for fish and wildlife species that would be lost.*
- ◆ *Where substantial loss of habitat for fish and wildlife species is unavoidable, compensate for impacts by preserving in-kind habitat.*

2013 PEIR Mitigation Measure 4-4: *Implementation of projects by other public agencies could conflict with existing zoning for forestland, timberland, or timberland zoned Timberland Production or result in loss of forestland from conversion of land to nonforest use.*

- ◆ *Protect habitat for migratory waterfowl and shorebirds by expanding existing wildlife refuges and management areas, and establishing new ones in or near wetland areas used by migratory waterfowl and shorebirds. Manage these areas by establishing suitable vegetation, hydrology, and other habitat components to optimize the use by migratory waterfowl and shorebirds.*
- ◆ *Protect, restore, and enhance connectivity of habitats, including but not limited to wetland and riparian habitats that function as migration corridors for wildlife species (similar to what has been implemented through programs such as the California Essential Habitat Connectivity Project). Acquire areas with potential to increase connectivity between existing habitats, protect these areas in perpetuity through the acquisition of conservation easements, deed restrictions, or similar tools, and restore the habitat for wildlife species in these areas. Habitat restoration might be accomplished by establishing suitable hydrology or other physical conditions for desirable vegetation, planting desirable vegetation, fencing and managing grazing, and other means.*
- ◆ *Protect migratory pathways for migratory aquatic species such as salmon, steelhead, and sturgeon including those that use Delta tributaries and floodplain habitats by screening new diversions, and screening existing diversions and removing existing migration barriers if the specific proposed project/activity (e.g., increased intake volume through an existing unscreened diversion, new diversion, new barrier, new barrier near an existing unscreened diversion, etc.) exacerbates the negative effect on migratory aquatic species caused by the existing barrier or unscreened diversion.*
- ◆ *Avoid or minimize alteration of flow patterns and water quality effects that could disrupt migratory cues for migratory aquatic species by implementing water management measures and establishing programs to reduce water pollution.*

F. Impact 5.3-3. Implementation of projects by other public agencies in response to the proposed amendments could involve other changes in the existing environment that, because of their location or nature, indirectly result in conversion of Farmland to nonagricultural use or conversion of forestland to nonforest use.

The PEIR finds that the Delta Plan Amendments could cause activities that adversely affect the viability of surrounding agricultural or forest uses, that impede access to agricultural areas, or that disrupt agricultural infrastructure in both the Primary and Extended Planning Areas. Consequently, these activities could indirectly result in significant temporary, long-term, or permanent adverse impacts related to the conversion of Farmland to nonagricultural use or forestland to nonforest use in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to

implement the performance measures. Activities by other public agencies in response to the DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measures 7-1 and 7-4, set forth above in the discussion of Impacts 5.3-1 and 5.3-2, respectively, and 2013 PEIR Mitigation Measure 9-1, set forth below, all of which were previously adopted and incorporated into the Delta Plan, would apply to covered actions and are recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 7-1 would minimize conversion of Farmland to nonagricultural uses due to actions taken by other public agencies in response to the Delta Plan Amendments. Mitigation Measure 7-4 would minimize loss of Forestland or conversion of Forestland to nonforest use due to actions taken by other public agencies in response to the Delta Plan Amendments. Mitigation Measure 9-1 would minimize conflicts with applicable plans and policies due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that Mitigation Measures 7-1, 7-4, and 9-1 would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measures 7-1, 7-4, and 9-1, or equally effective mitigation measures, is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 9-1: *Implementation of projects by other public agencies in response to the Proposed Project could involve other changes in the existing environment that, because of their location or nature, indirectly result in conversion of Farmland to nonagricultural use or conversion of forestland to nonforest use.*

- ◆ *Use equipment and vehicles that are compliant with Air Resource Board (ARB) requirements and emission standards for on-road and off-road fleets and engines. New engines and retrofit control systems should reduce NOx and PM from diesel-fueled on-road and off-road vehicles and equipment.*
- ◆ *Minimize idling times either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage should be posted for construction workers at all entrances to the site.*
- ◆ *Maintain all equipment in proper working condition according to manufacturer's specifications.*
- ◆ *Use electric equipment when possible. Use lower-emitting alternative fuels to power vehicles and equipment where feasible.*
- ◆ *Use low Volatile Organic Compounds (VOC) coatings and chemicals; minimize chemical use.*
- ◆ *Prepare a dust control plan and apply dust control measures at the construction sites.*
- ◆ *To minimize track-out of dirt and mud from dirt and gravel roads, all trucks and equipment, including their tires, shall be washed prior to leaving the site. Only exteriors of trucks and equipment are to be washed (no engine degreasing), no detergents or*

chemicals shall be used in the wash water, and off-site runoff of rinse water shall be prevented.

- ◆ *For projects involving land fallowing, land conversion, or other agricultural operations, implement applicable BMPs from agencies such as the U.S. Department of Agriculture Natural Resources Conservation Service to reduce potential dust emissions.*

BMPs for fallowed lands could include, but are not limited to, the following:

- ◆ *Implement conservation cropping sequences and wind erosion protection measures, such as:*
 - *Plan ahead to start with plenty of vegetation residue, and maintain as much residue on fallowed fields as possible. Residue is more effective for wind erosion protection if left standing.*
 - *If residues are not adequate, small grain can be seeded about the first of the year to take advantage of the winter rains and irrigated with a light irrigation if needed to get adequate growth.*
 - *Avoid any tillage if possible.*
 - *Avoid any traffic or tillage when fields are extremely dry to avoid pulverization.*
- ◆ *Apply soil stabilization chemicals to fallowed lands.*
- ◆ *Re-apply drain water to allow protective vegetation to be established.*
- ◆ *Reuse irrigation return flows to irrigate windbreaks across blocks of land including many fields to reduce wind fetch and reduce emissions from fallowed, farmed, and other lands within the block. Windbreak species, management, and layout would be optimized to achieve the largest feasible dust emissions reduction per unit water available for their irrigation. Windbreak corridors would provide ancillary aesthetic and habitat benefits.*

Project-specific lists of mitigation measures should also include the recommendations or requirements of the local air district(s). For example, the Bay Area Air Quality Management District (BAAQMD) lists the following basic and additional mitigation measures to reduce emissions from project construction (BAAQMD, 2010. California Environmental Quality Act Air Quality Guidelines. December 2010. San Francisco, California. Site accessed February 8, 2011. <http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES.aspx>).

Basic Construction Mitigation Measures Recommended for ALL Proposed Projects

1. *All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.*
2. *All haul trucks transporting soil, sand, or other loose material off-site shall be covered.*
3. *All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.*
4. *All vehicle speeds on unpaved roads shall be limited to 15 mph.*
5. *All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible.*

Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

- 6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.*
- 7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.*
- 8. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.*

Additional Construction Mitigation Measures Recommended for Projects with Construction Emissions Above the Threshold

- 1. All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.*
- 2. All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.*
- 3. Wind breaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity.*
- 4. Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.*
- 5. The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.*
- 6. All trucks and equipment, including their tires, shall be washed off prior to leaving the site.*
- 7. Site accesses to a distance of 100 feet from the paved road shall be treated with a 6- to 12-inch compacted layer of wood chips, mulch, or gravel.*
- 8. Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.*
- 9. Minimizing the idling time of diesel powered construction equipment to two minutes.*
- 10. The project shall develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet- average 20 percent NO_x reduction and 45 percent PM reduction compared to the most recent ARB fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as*

particulate filters, and/or other options as such become available.

11. *Use low VOC (i.e., reactive organic gases or ROG) coatings beyond the local requirements (i.e., Regulation 8, Rule 3: Architectural Coatings).*
12. *Require that all construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of NO_x and PM.*
13. *Require all contractors to use equipment that meets ARB's most recent certification standard for off-road heavy duty diesel engines.*

G. Impact 5.4-1. Implementation of projects by other public agencies could conflict with an applicable air quality plan.

The PEIR finds that the Delta Plan Amendments could result in emissions-generating activities that would cause a significant adverse impact related to conflicts with applicable air quality plans in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 9-1, set forth above in the discussion of Impact 5.3-3 and previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 9-1 would minimize conflicts with applicable plans and policies due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 9-1 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

H. Impact 5.4-2. Emissions associated with construction of projects by other public agencies in response to the proposed amendments could violate an air quality standard, contribute substantially to an air quality violation, and/or result in a short-term cumulatively considerable net increase of nonattainment pollutants.

The PEIR finds that the Delta Plan Amendments could cause temporary emissions of air pollutants associated with construction that would result in significant adverse impacts related to the violation of air quality standards, substantial contribution to an air quality violation, and/or a short-term cumulatively considerable net increase of non-attainment pollutants in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities associated with projects implemented by other public agencies in response to the proposed

amendments, including new flood management infrastructure, new or improved storage and conveyance facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of Mitigation Measure 9-1, set forth above in the discussion of Impact 5.3-3 and previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 9-1 would minimize construction-related pollutant emissions due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 9-1 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

I. Impact 5.4-4. Emissions associated with construction of projects by other public agencies in response to the proposed amendments could expose sensitive receptors to substantial pollutant concentrations.

The PEIR finds that the Delta Plan Amendments could cause construction-generated air pollutant emissions, such as emissions of fugitive dust, CO, and TACs, that could result in significant adverse impacts related to the exposure of sensitive receptors (including rural residences) to substantial pollutant concentrations in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 9-3, set forth below, which was previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 9-3 would minimize construction air pollutant emissions due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 9-3 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 9-3: *Emissions associated with construction of projects by other public agencies in response to the proposed amendments could expose sensitive receptors to substantial pollutant concentrations.*

The Air Quality Technical Report prepared for the Proposed Project should evaluate human health risks from potential exposures of sensitive receptors to substantial pollutant concentrations on a project-specific basis. The need for a human health risk analysis should be evaluated using approved screening tools, and discussed with the local Air Quality Management District (AQMD) or Air Pollution Control District (APCD) at the time of preparation of the Air Quality Technical Report.

If the health risk is determined to be significant on a project-specific basis, control measures should be implemented to reduce health risks to levels below the applicable air district threshold.

Implementation of one or more of the following requirements, where feasible and appropriate, would reduce the effects of Impact 9-3a, Construction or Operation of Projects Would Expose Sensitive Receptors to Substantial Pollutant Concentrations (from the 2013 Delta Plan Program EIR):

- ♦ *Implement Mitigation Measure 9-1 to reduce air emissions and air quality impacts from construction and operations of the Proposed Project.*
- ♦ *Use equipment with diesel engines designed or retrofitted to minimize DPM emissions, usually through the use of catalytic particulate filters in the exhaust.*
- ♦ *Use electric equipment to eliminate local combustion emissions.*
- ♦ *Use alternative fuels, such as compressed natural gas or liquefied natural gas.*

If the project would result in significant emissions of airborne, naturally occurring asbestos or metals from excavation, hauling, blasting, tunneling, placement, or other handling of rocks or soil, a dust mitigation and air monitoring plan would be required to specify site-specific measures to minimize emissions and ensure that airborne concentrations of the toxic air contaminants (TACs) of concern do not exceed regulatory or risk-based trigger levels.

J. Impact 5.4-5. Emissions associated with operation of projects by other public agencies in response to the proposed amendments could violate an air quality standard, contribute substantially to an air quality violation, and/or result in a cumulatively considerable net increase of nonattainment pollutants.

The PEIR finds that the Delta Plan Amendments could cause long-term emissions of air pollutants that would result in a significant adverse impact related to the violation of an air quality standard, the substantial contribution to an air quality violation, and/or a short-term cumulatively considerable net increase of nonattainment pollutants in both the Primary and Extended Planning Areas. These impacts could be caused constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the

proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 9-1, set forth above in the discussion of Impact 5.3-3 and previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 9-1 would minimize operational pollutant emissions due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 9-1, or equally effective mitigation measures, is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

K. Impact 5.4-6. Emissions associated with operation of projects by other public agencies in response to the proposed amendments could create objectionable odors affecting a substantial number of people.

The PEIR finds that the Delta Plan Amendments could cause a significant adverse impact related to objectionable odorous emissions affecting a substantial number of people in both the Primary and Extended Planning Areas. These impacts could be caused by constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed PM amendment, because these projects are more likely to be implemented in densely populated areas. Projects operated by other public agencies in response to the DLIS and CSO Amendments are not likely to result in odorous emissions that would affect a substantial number of people in the Primary Planning Area due to their probable location in sparsely populated areas. Projects operated by other public agencies in response to the CSO Amendment may result in odorous emissions affecting a substantial number of people in the Extended Planning Area due to the greater number of communities of significant size and density there. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 9-2, set forth below, which was previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 9-2 would minimize operational odor emissions due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 9-2 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 9-2: *Emissions associated with operation of projects by other public agencies in response to the proposed amendments could create objectionable odors affecting a substantial number of people.*

- ◆ *Applicants should develop and implement a project-specific Odor Management Plan. Odor control measures that can be incorporated into this plan include, but are not limited to, the following:*
 - *A list of potential odor sources*
 - *Identification and description of the most likely sources of odor*
 - *Identification of potential, intensity, and frequency of odor from likely sources*
 - *A list of odor control technologies and management practices that could be implemented to minimize odor releases*
 - *A protocol for monitoring, recording, reporting and responding to odor events, including notification of the local and downwind jurisdictions of projects that may result in odor complaints, including contact numbers for responsible individuals during construction. If an odor event occurs, construction activity should be suspended until conditions change, removing the cause and resultant odors, or until alternate management practices are implemented that significantly reduce the odors.*

L. Impact 5.4-8. Activities associated with construction of projects by other public agencies in response to the proposed amendments could result in an increase in GHG emissions that may have a significant impact on the environment.

The PEIR finds that the Delta Plan Amendments could cause a significant adverse impact related to an increase in construction-generated GHG emissions in both the Primary and Extended Planning Areas. This impact could be caused by construction activities associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 21-1, set forth below, which was previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 21-1 would minimize construction-generated GHG emissions due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 21-1 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 21-1: *Activities associated with construction of projects by other public agencies in response to the proposed amendments could result in an increase in GHG emissions that may have a significant impact on the environment.*

Implement GHG mitigation measures listed in the most recent California Air Pollution Control Officers Association (CAPCOA), BAAQMD, and other air district guidance documents (e.g., CAPCOA, 2010. Quantifying Greenhouse Gas Mitigation Measures. A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures. Sacramento, California. August, p. 210-232; BAAQMD, 2011. California Environmental Quality Act Air Quality Guidelines. San Francisco, California. Updated May 2011, p. 8-6). Current versions of such guidance documents list the following for construction:

- 1. Use alternative fuels for construction equipment.*
- 2. Use electric and hybrid construction equipment.*
- 3. Limit construction equipment idling beyond regulatory requirements.*
- 4. Institute a heavy-duty off-road vehicle plan.*
- 5. Implement a construction vehicle inventory tracking system.*
- 6. Use local building materials for at least ten percent of total materials.*
- 7. Recycle or reuse at least 50 percent of construction waste or demolition materials*

In addition, the California Attorney General's Office has developed a list of various measures that may reduce GHG emissions at the individual project level. A selected list of those proposed measures that could be applied to DWR projects was appended to the DWR guidance document, titled Guidance for Quantifying Greenhouse Gas Emissions and Determining the Significance of their Contribution to Global Climate Change for CEQA Purposes (DWR, 2010. Guidance for Quantifying Greenhouse Gas Emissions and Determining the Significance of their Contribution to Global Climate Change for CEQA Purposes. California Department of Water Resources Internal Guidance Document. CEQA Climate Change Committee. Sacramento, CA. January, Appendix B). As appropriate, the measures can be included as design features of a project, required as changes to the project, or imposed as mitigation (whether undertaken directly by the project proponent or funded by mitigation fees). The measures are examples; the list is not intended to be exhaustive. The following may serve as BMPs to be considered and implemented (as applicable) during design, construction, operation, and maintenance of project facilities.

Efficiency

- 1. Design buildings to be energy efficient. Site buildings to take advantage of shade, prevailing winds, landscaping, and sun screens to reduce energy use.*
- 2. Install efficient lighting and lighting control systems. Use daylight as an integral part of lighting systems in buildings.*
- 3. Install light colored "cool" roofs, cool pavements, and strategically placed shade trees.*
- 4. Install energy efficient heating and cooling systems, appliances and equipment, and control systems.*
- 5. Install light-emitting diodes for street and other outdoor lighting.*

6. *Limit the hours of operation of outdoor lighting.*
7. *Provide education on energy efficiency.*

Renewable Energy

1. *Install solar and wind power systems and energy-efficient heating ventilation and air conditioning.*
2. *Install solar panels over parking areas.*
3. *Use combined heat and power in appropriate applications.*

Water Conservation and Efficiency

1. *Create water-efficient landscapes.*
2. *Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls.*
3. *Use reclaimed water for landscape irrigation. Install the infrastructure to deliver and use reclaimed water.*
4. *Design buildings to be water-efficient. Install water-efficient fixtures and appliances.*
5. *Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff.*
6. *Restrict the use of water for cleaning outdoor surfaces and vehicles.*
7. *Implement low-impact development practices that maintain the existing hydrologic character of the site to manage stormwater and protect the environment. (Retaining stormwater runoff on-site can drastically reduce the need for energy-intensive imported water at the site.)*
8. *Devise a comprehensive water conservation strategy appropriate for the project and location. The strategy may include many of the specific items listed above, plus other innovative measures that are appropriate to the specific project.*
9. *Provide education about water conservation.*

Solid Waste Measures

1. *Reuse and recycle construction and demolition waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard).*
2. *Provide interior and exterior storage areas for recyclables and green waste and adequate recycling containers located in public areas.*
3. *Recover by-product methane to generate electricity.*

Transportation and Motor Vehicles

1. *Limit idling time for commercial vehicles, including delivery and construction vehicles.*
2. *Use low or zero-emission vehicles, including construction vehicles.*
3. *Institute a heavy-duty off-road vehicle plan and a construction vehicle inventory tracking system for construction projects.*
4. *Promote ride sharing.*
5. *Provide the necessary facilities and infrastructure to encourage the use of low or zero-emission vehicles (e.g., electric vehicle charging facilities and conveniently located alternative*

fueling stations).

- 6. Increase the cost of driving and parking private vehicles by, e.g., imposing tolls and parking fees.*
- 7. Provide shuttle service to public transit/work sites.*
- 8. Provide information on all options for individuals and businesses to reduce transportation-related emissions.*

Carbon Offsets

- 1. If, after analyzing and requiring all reasonable and feasible on-site mitigation measures for avoiding or reducing greenhouse gas-related impacts, the lead agency determines that additional mitigation is required, the agency may consider additional off-site mitigation. The project proponent could, for example, fund off-site mitigation projects (e.g., alternative energy projects, or energy or water audits for existing projects) that will reduce carbon emissions, conduct an audit of its other existing operations and agree to retrofit, or purchase carbon “credits” from another entity that will undertake mitigation.*
- 2. The topic of offsets can be complicated, and a full discussion is outside the scope of this summary document. Issues that the lead agency should consider include:*
 - a. The location of the off-site mitigation. (If the off-site mitigation is far from the project, any additional, non-climate related benefits of the mitigation will be lost to the local community.)*
 - b. Whether the emissions reductions from off-site mitigation can be quantified and verified.*
 - c. Whether the mitigation ratio should be greater than 1:1 to reflect any uncertainty about the effectiveness of the offset.*

SmartWay Truck Efficiency

The strategy involves requiring existing trucks/trailers to be retrofitted with the best available “SmartWay Transport” and/or ARB approved technology. Technologies that reduce GHG emissions from trucks may include devices that reduce aerodynamic drag and rolling resistance. Aerodynamic drag may be reduced using devices such as cab roof fairings, cab side gap fairings, cab side skirts, and on the trailer side, trailer side skirts, gap fairings, and trailer tail. Rolling resistance may be reduced using single wide tires or low-rolling resistance tires and automatic tire inflation systems on both the tractor and the trailer.

Tire Inflation Program

The strategy involves actions to ensure that vehicle tire pressure is maintained to manufacturer specifications.

Blended Cements

The strategy to reduce CO₂ emissions involves the addition of blending materials such as limestone, fly ash, natural pozzolan and/or slag to replace some of the clinker in the production of Portland cement.

Anti-idling Enforcement

The strategy guarantees emission reductions as claimed by increasing compliance with anti-idling rules, thereby reducing the amount of fuel burned through unnecessary idling. Measures

may include enhanced field enforcement of anti-idling regulations, increased penalties for violations of anti-idling regulations, and restriction on registrations of heavy-duty diesel vehicles with uncorrected idling violations.

M. Impact 5.4-9. Activities associated with operation of projects by other public agencies in response to the proposed amendments could result in an increase in GHG emissions that may have a significant impact on the environment.

The PEIR finds that the Delta Plan Amendments could cause significant adverse impacts in both the Primary and Extended Planning Areas related to an increase in long-term GHG emissions associated with the operation of projects by other public agencies. These impacts could be caused by constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 21-1, set forth above in the discussion of Impact 5.4-8 and previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 21-1 would minimize operational GHG emissions due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 21-1 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

N. Impact 5.4-10. Implementation of projects by other public agencies in response to the proposed amendments could conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of GHGs.

The PEIR finds that the Delta Plan Amendments could cause significant adverse impacts related to conflicts with GHG reduction policies, plans, and regulations in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 21-1, set forth above in the discussion of Impact 5.4-8 and previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-

covered actions. Mitigation Measure 21-1 would minimize conflicts with applicable GHG reduction plans and policies due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 21-1 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

O. Impact 5.5-1. Implementation of projects by other public agencies in response to the proposed amendments could adversely impact habitat associated with special-status fish species.

The PEIR finds that the Delta Plan Amendments could cause significant temporary and permanent adverse impacts to habitat associated with special-status fish species, including Delta Smelt, Chinook Salmon, steelhead, green sturgeon, Sacramento splittail, longfin smelt, and others in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measures 4-1, 4-2, 4-3, and 4-4, set forth above in the discussion of Impact 5.3-2, and 2013 PEIR Mitigation Measure 4-5, set forth below, all of which were previously adopted and incorporated into the Delta Plan, would apply to covered actions and are recommended to be implemented by other public agencies for non-covered actions. Mitigation Measures 4-1 through 4-5 would avoid, minimize, and compensate for degradation in area and/or habitat quality of sensitive natural communities due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that Mitigation Measures 4-1 through 4-5 would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measures 4-1 through 4-5, or equally effective mitigation measures, is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 4-5: *Implementation of projects by other public agencies in response to the proposed amendments could adversely impact habitat associated with special-status fish species.*

- ♦ *Prior to construction, evaluate impacts to trees or other biological resources protected by local policies and ordinances and abide by any permit requirements associated with these policies and ordinances.*

P. Impact 5.5-2. Implementation of projects by other public agencies in response to the proposed amendments could result in adverse direct effects on special-status fish species.

The PEIR finds that the Delta Plan Amendments could cause significant temporary and permanent adverse direct impacts, including disturbance and/or direct mortality, to special-status fish species in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and construction-related actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area. Species endemic to the Delta, such as Delta Smelt, longfin smelt, and Sacramento splittail, would avoid direct disturbance from project activities undertaken in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 4-2, set forth above in the discussion of Impact 5.3-2 and previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 4-2 would minimize direct effects on special-status fish species due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 4-2 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

Q. Impact 5.5-3. Implementation of projects by other public agencies in response to the proposed amendments could interfere with the movement of native resident fish species.

The PEIR finds that the Delta Plan Amendments could cause significant temporary and permanent adverse impacts related to interference with the movement of native resident fish species in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the

operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area. Activities that use machinery and heavy equipment have the potential to produce vibrations and acoustic disturbance that can temporarily disrupt fish movement or harass fish and reduce their ability to use certain aquatic habitats. Operation of facilities, such as water intakes and pumping plants, located along waterways could substantially interrupt migratory fish habitat corridors.

Implementation of 2013 PEIR Mitigation Measures 4-2 and 4-4, set forth above in the discussion of Impact 5.3-2 and previously adopted and incorporated into the Delta Plan, would apply to covered actions and are recommended to be implemented by other public agencies for non-covered actions. Mitigation Measures 4-2 and 4-4 would minimize interference with the movement of native resident fish species due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that Mitigation Measures 4-2 and 4-4 would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measures 4-2 and 4-4, or equally effective mitigation measures, is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

R. Impact 5.6-1. Implementation of projects by other public agencies in response to the proposed amendments could result in adverse effects on sensitive natural communities, including wetlands and riparian habitat.

The PEIR finds that the Delta Plan Amendments could cause significant adverse effects on sensitive natural communities including wetlands and riparian habitat in both the Primary and Extended Planning Areas. Impacts could include the permanent loss of different sensitive natural communities. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 4-1, set forth above in the discussion of Impact 5.3-2 and previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 4-1 would minimize impacts to terrestrial biological resources due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 4-1 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

S. Impact 5.6-2. Implementation of projects by other public agencies in response to the proposed amendments could result in adverse effects on special-status plant species.

The PEIR finds that the Delta Plan Amendments could cause significant adverse effects on special-status plant species in both the Primary and Extended Planning Areas. Impacts could include the permanent loss of special-status plants or their habitat. Such permanent impacts represent mortality of special-status plants or a conversion of the type of habitat upon which these species depend that persists through the life of the project. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 4-2, set forth above in the discussion of Impact 5.3-2 and previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 4-2 would minimize impacts to terrestrial biological resources due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 4-2 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

T. Impact 5.6-3. Implementation of projects by other public agencies in response to the proposed amendments could result in adverse effects on special-status terrestrial wildlife species.

The PEIR finds that the Delta Plan Amendments could cause significant adverse impacts to special-status terrestrial wildlife species in the Primary Planning Area (including vernal pool invertebrates, valley elderberry longhorn beetles, giant garter snake, northwestern pond turtle, burrowing owl, and Swainson's hawk) and the Extended Planning Area (including California tiger salamander, California red-legged frog, and San Joaquin kit fox). Impacts could include permanent loss of special-status terrestrial wildlife. Such permanent impacts represent mortality of special-status terrestrial wildlife species or a conversion of the type of habitat upon which these species depend that persists through the life of the project. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 4-2, set forth above in the discussion of Impact 5.3-2 and previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 4-2 would minimize impacts to terrestrial biological resources due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 4-2 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

U. Impact 5.6-4. Implementation of projects by other public agencies in response to the proposed amendments could result in adverse effects on terrestrial wildlife species habitat.

The PEIR finds that the Delta Plan Amendments could cause permanent significant adverse impacts to terrestrial wildlife habitat in both the Primary and Extended Planning Areas. Impacts could include permanent loss of terrestrial wildlife habitat, which means that the loss of the habitat would persist into perpetuity unless it is actively replaced. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 4-3, set forth above in the discussion of Impact 5.3-2 and previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 4-3 would minimize impacts to terrestrial biological resources and wildlife species habitat due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 4-3 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

V. Impact 5.6-5. Implementation of projects by other public agencies in response to the proposed amendments could interfere with the movement of native resident or migratory wildlife species.

The PEIR finds that the Delta Plan Amendments could cause temporary significant adverse impacts to wildlife movement corridors and permanent changes to migratory movement corridors in both the Primary and Extended Planning Areas. These impacts could be caused by

construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 4-4, set forth above in the discussion of Impact 5.3-2 and previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 4-4 would minimize impacts to terrestrial biological resources and wildlife movement corridors due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 4-4 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

W. Impact 5.6-6. Implementation of projects by other public agencies in response to the proposed amendments could conflict with local policies or ordinances protecting biological resources or the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat protection plan.

The PEIR finds that the Delta Plan Amendments could cause significant adverse impacts related to conflicts with local policies or ordinances protecting biological resources in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 4-5, set forth above in the discussion of Impact 5.5-1 and previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 4-5 would minimize impacts to terrestrial biological resources due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 4-5 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

X. Impact 5.7-1. Implementation of projects by other public agencies in response to the proposed amendments could result in substantial adverse change to significant historic buildings, structures, or linear features.

The PEIR finds that the Delta Plan Amendments could cause significant permanent adverse impacts to historic built resources, as well as to the historic setting of significant built resources in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Construction activities are more likely than operational activities to cause these impacts. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 10-3, set forth below, which was previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 10-3 would minimize impacts to built cultural resources due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 10-3 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 10-3: *Implementation of projects by other public agencies in response to the proposed amendments could result in a substantial adverse change to significant historic buildings, structures, or linear features.*

- ◆ *Inventory and evaluate historic-era buildings, structures, and linear features. Conduct cultural resources studies to determine whether historic-era buildings, structures, and linear features in the project area are eligible for listing in the CRHR.*
- ◆ *Before construction activities begin, an inventory and evaluation of historic-era resources in the project area should be conducted under the direct supervision of an architectural historian meeting the Secretary of the Interior's Professional Qualification Standards for history or architectural history. The documentation should include conducting an intensive field survey, background research on the history of the project area, and property-specific research. Based on this research, the eligibility of historic-era resources located in the project area should be evaluated by the architectural historian using criteria for listing in the CRHR. The resources would be recorded on DPR 523 forms and the findings documented in a technical report. If federal funding or approval is required, then the project implementation agencies would comply with Section 106 of the National Historic Preservation Act.*
- ◆ *Identify measures to avoid significant historic resources. Avoidance through project redesign is the preferred mitigation measure for mitigating potential effects on historic-era buildings, structures, linear features, and archaeological sites that appear to be eligible for listing in the NRHP or CRHR.*
- ◆ *Record photographic and written documentation to Historic American Building Survey (HABS)/Historic American Engineering Record (HAER) standards. If avoidance of a significant historic resource is not feasible, the lead agency should ensure that HABS/HAER documentation is completed. Through HABS/HAER documentation, a qualified architectural historian and qualified photographer should formally document the historic resource through large-format photography, measured drawings, written architectural descriptions, and historical narratives. The completed documentation should be submitted to the Library of Congress.*
- ◆ *Conform to the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings in the event of relocation. If any historic buildings, structures, or levees are relocated or altered, the lead agency should ensure that any changes to significant buildings or structures conform to the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings. Implementation of this measure can mitigate potential changes to significant architectural resources.*
- ◆ *Conform to the Secretary of the Interior's Guidance for the Treatment of Cultural Landscapes to preserve landscapes' historic form, features, and details that have evolved over time.*

Y. Impact 5.7-2. Implementation of projects by other public agencies in response to the proposed amendments could result in the disturbance or destruction of prehistoric and historic-era archeological resources, including submerged resources.

The PEIR finds that the Delta Plan Amendments could cause significant permanent adverse impacts to archaeological resources through their damage or destruction in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of Mitigation Measure 10-1, set forth below, which was previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 10-1 would minimize degradation of archaeological resources due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 10-1 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 10-1: *Implementation of projects by other public agencies in response to the proposed amendments could result in the disturbance or destruction of prehistoric and historic-era archaeological resources, including submerged resources.*

- ◆ *Before any ground-disturbing activities begin, conduct intensive archaeological surveys, including subsurface investigations to identify the locations, extent, and integrity of presently undocumented archaeological resources that may be located in areas of potential disturbance. In addition, if ground-disturbing activities are planned for an area where a previously documented prehistoric archaeological site has been recorded but no longer may be visible on the ground surface, conduct test excavations to determine whether intact archaeological subsurface deposits are present. Also conduct surveys at the project site for the possible presence of cultural landscapes and traditional cultural properties.*
- ◆ *If potentially California Register of Historical Resources (CRHR)-eligible prehistoric or historic-era archaeological resources are discovered during the survey phase, additional investigations may be necessary. These investigations could include, but not necessarily be limited to, measures providing resource avoidance, archival research, archaeological testing and CRHR eligibility evaluations, and contiguous excavation unit data recovery. In addition, upon discovery of potentially CRHR-eligible prehistoric resources, coordinate with the NAHC and the Native American community to provide for an opportunity for suitable individuals and tribal organizations, including federally recognized tribes, to comment on the proposed research.*
- ◆ *If CRHR-eligible archaeological resources or cultural landscapes/properties are present and would be physically impacted, specific strategies to avoid or protect these resources should be implemented if feasible. These measures may include:*
 - *Planning construction to avoid the sensitive sites*
 - *Deeding the sensitive sites into permanent conservation easements*
 - *Capping or covering archaeological sites*
 - *Planning parks, green space, or other open space to incorporate the sensitive sites*
 - *Granting of cultural easements to Native American tribes for the purpose of protecting cultural resource properties*
- ◆ *If federal agencies are participants in the activity and Section 106 of the National Historic Preservation Act applies, conduct formal consultation with the State Historic Preservation Officer, Tribal Historic Preservation Officer (THPO) or Tribal Administrator for tribes that do not have a THPO, and the Native American community. Potential adverse effects on cultural resources recommended as eligible for listing in the National Register of Historic Places (NRHP) will be resolved through the development of a memorandum of agreement and/or a program-level agreement.*
- ◆ *As part of efforts to identify, evaluate, and consider cultural resources, including prehistoric sites, Native American human remains, and traditional cultural properties, Native Americans would be consulted. The California Native American Heritage Commission (NAHC) would be asked to provide a list of Native Americans who should be contacted concerning an identified future project. The NAHC would also be asked to search its Sacred Lands Files. Native Americans identified by the NAHC would be*

contacted by letter to request information on cultural resources of importance. They also would be asked to identify concerns they have about the project. THPOs and Tribal Administrators of federally recognized tribes would be contacted and asked to search their files and provide information necessary for the identification and consideration of cultural resources.

- ♦ *Before any project-specific ground-disturbing activities begin, conduct investigations to identify submerged cultural resources. These investigations would include review of State Lands Commission (SLC) Shipwrecks Database and other SLC files, and remote sensing surveys conducted under the direction of a qualified maritime archaeologist. If avoidance of significant submerged cultural resources is not feasible, a permit from SLC may be necessary to conduct resource documentation and possible salvage of artifacts, ship components, and other data and objects.*
- ♦ *If CRHR-eligible archaeological resources, including submerged or buried shipwrecks or other maritime-related cultural resources, are discovered during construction activities, work would halt within 100 feet of the discovery until the find can be evaluated by a qualified archaeologist or maritime archaeologist as appropriate. In addition, SLC would be consulted.*

Z. Impact 5.7-3. Implementation of projects by other public agencies in response to the proposed amendments could result in the disturbance or destruction of buried human remains.

The PEIR finds that the Delta Plan Amendments could cause significant permanent adverse impacts to buried human remains through their damage or destruction in both the Primary and Extended Planning Areas, where numerous early Native American human interments have been documented. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 10-2, set forth below, which was previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 10-2 would minimize impacts to human remains due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 10-2 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 10-2: *Implementation of projects by other public agencies in response to the proposed amendments could result in the disturbance or destruction of buried human remains.*

The identification, evaluation, and determination of disposition of Native American human remains shall be conducted in accordance with Native American consultation procedures described below and in Mitigation Measure 10-1. The location, content, and character of Native American human remains are confidential and shall not be released to the public. Native American human remains and associated funerary objects shall be treated with the utmost respect and in accordance with the direction of the identified Most Likely Descendant (MLD).

- ♦ *If human remains are encountered during ground-disturbing construction activities, stop work that would potentially affect the find and contact the county coroner.*
 - *In accordance with the California Health and Safety Code and the California Native American Grave Protection and Repatriation Act (CNAGPRA), if human remains are uncovered during ground-disturbing activities, the contractor shall immediately halt potentially damaging excavation in the area of the burial and notify the county coroner, a professional archaeologist to determine the nature of the remains, and a representative of California Indian tribes. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or State lands (Health and Safety Code section 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she must contact the NAHC by telephone within 24 hours of making that determination (Health and Safety Code section 7050[c]).*
 - *Following the coroner's findings, the property owner, contractor or project proponent, an archaeologist, and the NAHC-designated MLD shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities for acting upon notification of a discovery of Native American human remains are identified in California Public Resources Code section 5097.9.*
 - *Upon the discovery of Native American remains, the landowner shall ensure that the immediate vicinity (according to generally accepted cultural or archaeological standards and practices) is not damaged or disturbed by further development activity until consultation with the MLD has taken place. The MLD shall have 48 hours to complete a site inspection and make recommendations after being granted access to the site.*
 - *A range of possible treatments for the remains, including nondestructive removal and analysis, preservation in place, relinquishment of the remains and associated items to the descendants, or other culturally appropriate treatment, may be discussed. California Public Resources Code section 5097.9 suggests that the concerned parties may extend discussions beyond the initial 48 hours to allow for the discovery of additional remains. The following is a list of site protection measures that the landowner shall employ:*
 - (1) *Record the site with the NAHC or the appropriate information center.*
 - (2) *Use an open space or conservation zoning designation or easement.*

- (3) *Record a document with the county in which the property is located.*
- *The landowner or his or her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance if the NAHC is unable to identify a MLD or if the MLD fails to make a recommendation within 48 hours after being granted access to the site. The landowner or his or her authorized representative may also reinter the remains in a location not subject to further disturbance if he or she rejects the recommendation of the MLD and mediation by the NAHC fails to provide measures acceptable to the landowner.*
 - *If the discovery of human remains occurs on lands owned and administered by a federal agency, the provisions of the Native American Graves Protection and Repatriation Act (NAGPRA) will apply. NAGPRA requires federal agencies and certain recipients of federal funds to document Native American human remains and cultural items in their collections, notify native groups of their holdings, and provide an opportunity for repatriation of these materials. The act also requires planning for dealing with potential future collections of Native American human remains and associated funerary objects, sacred objects, and objects of cultural patrimony.*

AA. Impact 5.7-4: Implementation of projects by other public agencies in response to the proposed amendments could result in the disturbance or destruction of paleontological resources.

The PEIR finds that the Delta Plan Amendments could cause significant permanent adverse impacts to paleontological resources, including their damage or destruction through disruption, inundation, or other harm, in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 12-1, set forth below, which was previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 12-1 would minimize impacts to paleontological resources due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 12-1 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 12-1: *Implementation of projects by other public agencies in response to the proposed amendments could result in the disturbance or destruction of paleontological resources.*

- ♦ *During the project-level analysis, a Paleontological Resources Monitoring and Recovery Plan (PRMRP) shall be developed and implemented for all actions. The PRMRP shall include protocols for paleontological resources monitoring in those areas where sediment with moderate to high paleontological sensitivity would be affected by construction-related excavations. The PRMRP also shall set forth the following procedures:*
 - *Confirming the paleontological sensitivity (high, moderate, or low) of the areas to be impacted through review of project-level geological and geotechnical data*
 - *Determining the qualifications of the paleontologist as established by the Society of Vertebrate Paleontology (SVP) (SVP, 1991. Standard Measures for assessment and mitigation of adverse impacts to nonrenewable paleontological resources. Society of Vertebrate Paleontology News Bulletin 152:2 – 5; SVP, 1995. Assessment and mitigation of adverse impacts to nonrenewable paleontological resources: Standard guidelines. Society of Vertebrate Paleontology News Bulletin 163: 22 – 27; SVP, 1996. Conditions of Receivership for Paleontologic Salvage Collections. Society of Vertebrate Paleontology News Bulletin. Vol. 166, pp. 31 – 32)*
 - *The assessment and recovery of discovered fossil resources*
 - *The preparation and curation of fossil finds*

The PRMRP would provide guidelines for the establishment of a yearly or biannual monitoring program led by a qualified paleontologist to determine the extent of fossiliferous sediment being exposed and affected by erosion, and determine whether paleontological resources are being lost. If loss of scientifically significant paleontological resources can be documented, then a recovery program should be implemented.

BB. Impact 5.9-1: Implementation of projects by other public agencies could expose people or structures to risk of loss, injury, or death due to fault rupture.

The PEIR finds that the Delta Plan Amendments could cause significant adverse effects related to exposing people or structures to risk of loss, injury, or death associated with the rupture of known earthquake faults in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS

Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 11-1, set forth below, which was previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 11-1 would minimize the potential impacts from fault rupture and seismic events due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the design and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 11-1 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 11-1: *Implementation of projects by other public agencies could expose people or structures to risk of loss, injury, or death due to fault rupture.*

- ♦ *For construction that occurs in an Alquist-Priolo Special Studies Zone, a determination must be made by a licensed practitioner (California Certified Engineering Geologist) that no fault traces are present within the building footprint of any structure intended for human occupancy. The standard of care for such determinations includes direct examination of potentially affected subsurface materials (soil and/or bedrock) by logging of subsurface trenches. Uncertainties regarding the exact locations of future ground ruptures associated with such determinations generally are resolved by providing a minimum setback of 50 feet from any known surface trace of an active fault. For critical structures, such as hospitals, dams, and emergency facilities, more stringent mitigation measures are required, including but not limited to greater structural setbacks and heavier reinforcement against strong ground motion, in compliance not only with California regulations but in many cases in compliance with additional Federal regulations.*
- ♦ *Lead agencies shall ensure that geotechnical design recommendations are included in the design of facilities and construction specifications to minimize the potential impacts from seismic events and the presence of adverse soil conditions. Recommended measures to address adverse conditions shall conform to applicable design codes, guidelines, and standards.*

CC. Impact 5.9-2: Implementation of projects by other public agencies could expose people or structures to risk of loss, injury, or death due to strong seismic groundshaking.

The PEIR finds that the Delta Plan Amendments could cause significant adverse impacts associated with exposing people or structures to risk of loss, injury, or death due to strong seismic groundshaking in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance

facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 11-2, set forth below, which was previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 11-2 would minimize potential impacts from strong seismic groundshaking due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the design and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 11-2 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 11-2: *Implementation of projects by other public agencies could expose people or structures to risk of loss, injury, or death due to strong seismic groundshaking.*

Require adherence, at minimum, to the precepts of the current approved version of the International Building Code (IBC). Included in the IBC are measures for mitigation of the impacts of strong ground motion on constructed works. In addition to the California-required conformance with the IBC, for critical structures, such as dams (including levees), hospitals, and emergency facilities, additional construction requirements are codified in federal statutes and the regulations of various federal agencies. Lead agencies will, by force of law, require conformance with these codified mitigation measures.

DD. Impact 5.9-3. Implementation of projects by other public agencies could expose people or structures to hazards associated with unstable soil conditions.

The PEIR finds that the Delta Plan Amendments could cause significant adverse impacts associated with exposing people or structures to unstable soil conditions—including landslides, expansive soils, subsidence, high organic matter soils, and nuisance water—in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measures 11-3, 11-5, 11-6, 11-7, and 11-9, set forth below, which were previously adopted and incorporated into the Delta Plan, would apply to covered actions and are recommended to be implemented by other public agencies for non-

covered actions. Mitigation Measures 11-3, 11-5, 11-6, 11-7, and 11-9 would minimize the potential impacts from unstable soil conditions, including landslides, expansive soils, subsidence, high organic matter soils, and nuisance water. However, because the extent, design, and location of such actions are not yet known, it is not possible to conclude that the mitigation measures would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measures 11-3, 11-5, 11-6, 11-7, and 11-9, or equally effective mitigation measures, is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 11-3: *Implementation of projects by other public agencies could expose people or structures to hazards associated with unstable soil conditions.*

- ◆ *For projects that would result in significant or potentially significant grading operations, a geotechnical investigation shall be performed and a geotechnical report prepared. The geotechnical report shall include a quantitative analysis to determine whether excavation or fill placement would result in a potential for damage due to soil subsidence during and/or after construction. Project designs shall incorporate measures to reduce the potential damage to an insignificant level, including but not limited to removal and recompaction of existing soils susceptible to subsidence, ground improvement (such as densification by compaction or grouting, soil cementation), and reinforcement of structural components to resist deformation due to subsidence. The site-specific potential for and severity of cyclic seismic loading shall be analyzed in the assessment of subsidence for specific projects.*
- ◆ *A geotechnical investigation shall be performed by an appropriately licensed professional engineer and/or geologist to determine the presence and thickness of potentially liquefiable sands that could result in loss of bearing value during seismic shaking events. Project designs shall incorporate measures to mitigate the potential damage to an insignificant level, including but not limited to ground improvement (such as grouting or soil cementation), surcharge loading by placement of fill, excavation, soil mixing with non-liquefiable finer-grained materials and replacement of liquefiable materials at shallow depths, and reinforcement of structural components to resist deformation due to liquefaction. An analysis of site-specific probable and credible seismic acceleration values, in accordance with current applicable standards of care, shall be performed to provide for suitable project design.*
- ◆ *For projects that would result in construction of wells intended for groundwater extraction, a hydrogeological/geotechnical investigation shall be performed in accordance with the current standards of care for such work by an appropriate licensed professional engineer or geologist to identify and quantify the potential for groundwater extraction-induced subsidence. The study shall include an analysis of existing conditions and modeling of future conditions to assess the potential for aquifer compaction/consolidation.*
- ◆ *For projects that would result in construction of surface reservoirs and canals a hydrogeological/geotechnical investigation shall be performed by a licensed professional engineer or geologist to identify and quantify the potential for seeps and springs to develop in areas adjacent to the proposed improvements and to propose mitigation measures. Mitigation of such seepage could include, without limitation, additives to*

concrete that reduce its permeability, construction of impervious liner systems, and design and construction of subdrainage (passive control) or dewatering systems (active control).

Geotechnical investigations and preparation of geotechnical reports shall be performed in the responsible care of California licensed geotechnical professionals including professional civil engineers, certified geotechnical engineers, professional geologists, certified engineering geologists, and certified hydrogeologists, all of whom should be practicing within the current standards of care for such work.

2013 PEIR Mitigation Measure 11-5: *Implementation of projects by other public agencies could expose people or structures to hazards associated with unstable soil conditions.*

- ◆ *In areas where expansive clays exist, a hydrogeological/geotechnical investigation shall be performed by a licensed professional engineer or geologist to identify and quantify the potential for expansion, particularly differential expansion of clayey soils due to leakage and saturation beneath new improvements. Measures could include, but are not limited to removal and recompaction of problematic expansive soils, soil stabilization, and/or reinforcement of constructed improvements to resist deformation due to expansion of subsurface soils.*

2013 PEIR Mitigation Measure 11-6: *Implementation of projects by other public agencies could expose people or structures to hazards associated with unstable soil conditions.*

- ◆ *For projects that would result in construction of canals, storage reservoirs, and other surface impoundments, project design shall provide for protection from leakage to the subsurface. Measures could include, but are not limited to, rendering concrete less permeable by specifying concrete additives such as bentonite, design of impermeable liner systems, design of leakage collection and recovery systems, and construction of impermeable subsurface cutoff walls.*
- ◆ *For ecosystem restoration projects that might cause subsurface seepage of nuisance water onto adjacent lands:*
 - *Perform seepage monitoring studies by measuring the level of shallow groundwater in the adjacent soils to evaluate the baseline conditions. Continue monitoring for seepage during and after the project implementation.*
 - *Develop a seepage monitoring plan if subsurface seepage constitutes nuisance water to the adjacent land.*
 - *Implement seepage control measures if adjacent land is not useable, such as installing subsurface agricultural drainage systems to avoid raising water levels into crop root zones. Cutoff walls and pumping wells can also be used to mitigate for the occurrence of subsurface nuisance water.*

2013 PEIR Mitigation Measure 11-7: *Implementation of projects by other public agencies could expose people or structures to hazards associated with unstable soil conditions.*

- ♦ *For projects that would result in construction of levees, surface impoundments, and other fill embankments, project design shall incorporate fill placement in accordance with local and State regulations and in accordance with the prevailing standards of care for such work. Measures could include, but are not limited to, blending of soils most susceptible to landsliding with soils having higher cohesion characteristics, installation of slope stabilization measures, designing top-of-slope berms or v-ditches, terrace drains and other surface runoff control measures, and designing slopes at lower inclinations.*

2013 PEIR Mitigation Measure 11-9: *Implementation of projects by other public agencies could expose people or structures to hazards associated with unstable soil conditions.*

- ♦ *For projects that would result in significant or potentially significant risk to structures due to the presence of highly organic soils, lead agencies shall require geotechnical evaluation prior to construction to identify measures to mitigate organic soils. The following measures may be considered:*
 - *Over-excavation and import of suitable fill material*
 - *Structural reinforcement of constructed works to resist deformation*
 - *Construction of structural supports below the depth of highly organic soils into materials with suitable bearing strength*

EE. Impact 5.9-4: Implementation of projects by other public agencies could result in substantial soil erosion or loss of topsoil.

The PEIR finds that the Delta Plan Amendments could cause significant adverse impacts associated with substantial soil erosion and the loss of topsoil in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 11-4, set forth below, which was previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 11-4 would minimize the potential impacts from erosion and loss of topsoil due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the design and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 11-4 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 11-4: *Implementation of projects by other public agencies could result in substantial soil erosion or loss of topsoil.*

- ♦ *Any covered action that would have significant soil erosion and topsoil loss impacts (Impact 11-4) shall incorporate specific measures for future projects that would expand the use of BMPs or optional erosion control measures listed in the SWPPPs. The SWPPP shall identify an effective combination of BMPs to reduce erosion during construction and to prevent erosion during operation. Examples of typical BMPs include:*
 - *Erosion control measures such as silt fencing, sand bags, straw bales and mats, and rice straw wattles shall be placed to reduce erosion and capture sediment. Straw used for erosion control shall be new cereal grain straw derived from rice, wheat, or barley; free of mold and noxious weed seed; and neither derived from dry-farmed crops nor previously used for stable bedding. Clearance shall be obtained from the County Agricultural Commissioner before straw obtained from outside the county is delivered to the work site. Monitoring requirements of the newly revised General Construction Permit shall be implemented, and more effective BMPs shall be identified and installed*
 - *During construction activities, topsoil shall be removed, stockpiled, and saved for reapplication following completion of construction. The top 6 inches shall be salvaged and reapplied to a comparable thickness. Soil material shall be placed in a manner that minimizes compaction and promotes plant reestablishment.*
 - *If catch basins are used for sediment capture, the site shall be graded to ensure stormwater runoff flows into the basins, and basins shall be designed for the appropriate storm interval as provided in the General Construction Permit.*
 - *Temporary work areas shall be surfaced with a compacted layer of well-graded gravel. They may be covered with a thin asphalt binder. Where expansive or compressible soils are present in temporary work areas, construction trailers shall be supported with concrete pads or footings.*
 - *Dust control shall conform to all federal, State, and local requirements and may include use of water trucks, street sweepers, or other methods described in the SWPPP.*
 - *Spoils shall be placed in 12-inch-thick loose lifts and compacted to reduce erosion and minimize future subsidence. Placement of peat spoils shall be on agricultural land where possible. Following construction, spoils sites shall be restored to avoid erosion.*

FF. Impact 5.9-5: Projects implemented by other public agencies could be located on soils that would not support the use of septic tanks.

The PEIR finds that the Delta Plan Amendments could result in significant adverse impacts related to facilities that may be sited in locations far from municipalities with sewer connections and on soils that would not support the use of septic tanks in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in

response to the proposed CSO and PM amendments, including new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment are not expected to include the use of septic tanks or alternative wastewater disposal in the Primary Planning Area. Additionally, activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 11-8, set forth below, which was previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 11-8 would minimize potential impacts from facilities located on soils that would not support the use of septic tanks due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent, design, and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 11-8 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 11-8: *Implementation of projects by other public agencies could be located on soils that would not support the use of septic tanks.*

- ♦ *A geotechnical investigation shall be performed and a geotechnical report prepared. The geotechnical report shall include a quantitative analysis to determine whether on-site soils would be suitable for an on-site wastewater treatment system. If it is determined that the soil could not support a conventional on-site treatment system, non- conventional systems shall be analyzed. Potential alternative systems include (SWRCB, 2011, Onsite Wastewater Treatment System Scoping Document. April 4, 2011. Site accessed September 1, 2011. http://www.swrcb.ca.gov/water_issues/programs/owts/index.shtml):*
 - *Containment systems that do not generate waste*
 - *Anoxic and anaerobic systems*
 - *Attached and suspended growth aerobic treatment systems*
 - *Natural treatment systems*
 - *Disinfection systems*
 - *Engineered-fill leach fields*
 - *Monitoring control systems*

GG. Impact 5.9-6: Implementation of projects by other public agencies could result in the loss of a known mineral resource.

The PEIR finds that the Delta Plan Amendments could cause significant adverse impacts related to the loss of a known mineral resource in both the Primary and Extended Planning Areas. Loss of a known mineral resources could occur both through potential placement of facilities in areas

with known mineral resources whose extraction would be limited by the implementing projects and through demand for aggregate resources from project construction. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 13-1, set forth below, which was previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 13-1 would minimize the potential impacts from loss of a known mineral resource due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 13-1 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 13-1: *Implementation of projects by other public agencies could result in the loss of a known mineral resource.*

- ◆ *Ensure land use compatibility between existing mineral resource extraction activities and projects, activities or actions that may be implemented as the result of the Proposed Project.*
- ◆ *Maintain adequate buffer between future projects and designated MRZ-2 sectors.*
- ◆ *Explore opportunities to classify and designate new MRZ-2 sectors (e.g., in existing MRZ-3 sectors) to ensure that important mineral resources are conserved and continue to be available for future construction needs.*
- ◆ *Ensure future land use changes within designated mineral resource extraction areas recognize mineral resource extraction as a compatible use.*
- ◆ *Limit use of construction aggregate to local sources with sufficient capacity to meet both project and future local development needs, to the extent possible.*
- ◆ *Use recycled aggregate where possible, to decrease the demand for new aggregate.*

HH. Impact 5.9-7: Implementation of projects by other public agencies could result in the loss of an important mineral resource recovery site.

The PEIR finds that the Delta Plan Amendments could cause significant adverse impacts related to the loss of an important mineral resource recovery site in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or

improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 13-2, set forth below, which was previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 13-2 would minimize the potential impacts from the loss of an important mineral resource recovery site due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 13-2 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 13.2: *Implementation of projects by other public agencies could result in the loss of an important mineral resource recovery site.*

- ◆ *Ensure access is maintained to existing, active mineral resource extraction sites both during and after project construction.*
- ◆ *Implement recommendations identified in the Division of Oil, Gas, and Geothermal Resources of the State Department of Conservation (DOGGR) construction site well review program (DOC, 2007. Well Review Program: Introduction and Application), such as:*
 - *For all future projects, identify all existing natural gas well sites and oil production facilities within or in close proximity to the project area.*
 - *Identify any oil and natural gas well within 100 feet of any navigable body of water or watercourse perennially covered by water or any officially recognized wildlife preserve as a “critical well” (California Code of Regulations, Title 14, Chapter 4, Article 2, Section 1720(a)(2)(B) and (C)). The State Department of Conservation (DOC) requires that a “critical well” include more stringent blowout prevention equipment than non-critical wells based on pressure testing and rating.*
 - *Identify safety measures to prevent unauthorized access to equipment.*
 - *Include safety shut-down devices on oil and natural gas wells and other equipment, as appropriate.*
 - *Notify DOC of new oil and natural gas wells or changes in oil and natural gas well operations or physical conditions, receive written approval from DOC of the changes, and receive written notification of DOC’s inspection of new or changed equipment. The approvals will be primarily related to the ability to: (1) protect all subsurface hydrocarbons and fresh water, (2) protect the environment, (3) use adequate blowout prevention equipment, and (4) use approved drilling and cementing techniques.*

- *If any plugged/abandoned or unrecorded oil and natural gas wells are uncovered during construction, the DOC should be notified, the wells should undergo remedial well plugging actions, and no structures should be constructed over the abandoned oil and natural gas wells.*
- *If oil and natural gas wells are under the jurisdiction or a lease from the California State Lands Commission, project proponents should provide additional plans and environmental documentation as required prior to modification of the oil or natural gas wells.*

II. Impact 5.10-1. Implementation of projects by other public agencies could involve the routine transport, use, or disposal of hazardous materials that if accidentally released could create a hazard to the public or the environment or be located within one-quarter mile of a school.

The PEIR finds that the Delta Plan Amendments could cause a significant adverse impact related to creating a hazard to the public, schools, or the environment in both the Primary and Extended Planning Areas from the accidental release of hazardous materials during their use, storage, or transport. In addition, if project sites are within 0.25 miles of an existing or proposed school, project-related activities could create a risk of exposing school occupants and school site users to accidental hazardous materials spills. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 14-1, set forth below, which was previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 14-1 would minimize impacts associated with accidental release of hazardous materials due to actions taken by other public entities in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 14-1 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 14-1. *Implementation of projects by other public agencies could involve the routine transport, use, or disposal of hazardous materials that if accidentally released could create a hazard to the public or the environment or be located within one-quarter mile of a school.*

- ♦ *Refueling and maintenance of vehicles and equipment to occur only in designated areas that are either bermed or covered with concrete, asphalt, or other impervious surfaces to control potential spills.*

- ◆ *Refueling of vehicles and equipment to occur only when employees are present.*
- ◆ *Vehicle and equipment service and maintenance conducted only by authorized personnel.*
- ◆ *Refueling conducted only with approved pumps, hoses, and nozzles.*
- ◆ *Catch-pans placed under equipment to catch potential spills during servicing.*
- ◆ *All disconnected hoses placed in containers to collect residual fuel from the hoses.*
- ◆ *Vehicle engines shut down during refueling.*
- ◆ *No smoking, open flames, or welding allowed in refueling or service areas.*
- ◆ *Refueling performed away from bodies of water to prevent contamination of water in the event of a leak or spill.*
- ◆ *When refueling is completed, the service truck to leave the project site.*
- ◆ *Service trucks provided with fire extinguishers and spill containment equipment, such as absorbents.*
- ◆ *Should a spill contaminate soil, the soil shall be placed in containers and disposed of as appropriate. All containers used to store hazardous materials to be inspected at least once per week for signs of leaking or failure. All maintenance and refueling areas to be inspected monthly. Results of inspections to be recorded in a logbook maintained onsite.*
- ◆ *Provision of an automatic sprinkler system for indoor hazardous material storage areas.*
- ◆ *Provision of an exhaust system for indoor hazardous material storage areas.*
- ◆ *Separation of incompatible materials by isolating them from each other with a noncombustible partition.*
- ◆ *Spill control in all storage, handling, and dispensing areas.*
- ◆ *Separate secondary containment for each chemical storage system. The secondary containment is required to hold the entire contents of the tank plus the volume of water for the fire suppression system that could be used for fire protection for a period of 20 minutes in the event of a catastrophic spill.*

In the unlikely event of a spill, the spill shall be reported to the appropriate regulatory agencies and contaminated soil shall be cleaned, treated, and/or removed in accordance with regulatory requirements. Small spills shall be contained and cleaned up immediately by trained, onsite personnel. Larger spills shall be reported via emergency phone numbers to obtain help from offsite containment and cleanup crews. All personnel working on the project during the construction phase shall be trained in handling hazardous materials and the dangers associated with hazardous materials. An onsite health and safety person shall be designated to implement health and safety guidelines and to contact emergency response personnel and the local hospital, if necessary.

If there is a large spill from a service or refueling truck, contaminated soil shall be placed into barrels or trucks by service personnel for offsite disposal at an appropriate facility in accordance with law. If a spill involves hazardous materials quantities equal to or greater than the specific Reportable Quantities as required by regulatory agencies (42 gallons for petroleum products), all federal, State, and local reporting requirements shall be followed. In the event of a fire or injury, the local fire department shall be called.

JJ. Impact 5.10-2. Ground-disturbing activities associated with construction of projects by other public agencies could unearth previously unidentified contaminated soil and/or groundwater that could expose construction workers, the public, and the environment to risks associated with hazardous materials.

The PEIR finds that the Delta Plan Amendments could cause significant adverse impacts related to the exposure of construction workers, the public, and the environment to existing and previously unidentified soil and/or groundwater contamination in both the Primary and Extended Planning Areas. These impacts could be caused by ground-disturbing construction activities associated with projects implemented by other public agencies in response to the proposed amendments, including the construction of new flood management infrastructure, the construction of new or improved storage and conveyance facilities, and construction activities to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 14-2, set forth below, which was previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 14-2 would minimize potential impacts from the exposure of construction workers, the public, and the environment to existing soil and/or groundwater contamination due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 14-2 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 14-2: *Ground-disturbing activities associated with the construction of projects by other public agencies could encounter previously unidentified contaminated soil and/or groundwater that could expose construction workers and the environment to risks associated with hazardous materials.*

- ♦ *To reduce the risk due to increased exposure to materials that could be released during soil disturbance, worker training programs and breathing apparatus shall be provided. Monitoring programs shall be implemented as areas are excavated to determine the potential for exposure to soil organisms or other constituents.*
- ♦ *To reduce risk to the community due to increased exposure to materials that could be released during soil disturbance, public outreach programs shall be conducted to educate the public of the types of construction activities and risks that could occur. In areas near extreme hazards, such as construction in areas with identified petroleum-product pipelines or soils with high concentrations of petroleum products, warning sirens shall be used at construction sites to immediately notify workers and residents. Emergency procedures shall be included in the education and outreach programs for the workers and the community.*

KK. Impact 5.10-3. Projects implemented by other public agencies could be located within 2 miles of an airport, resulting in a safety hazard.

The PEIR finds that the Delta Plan Amendments could cause significant adverse impacts related to locating projects within two miles of an airport, resulting in a safety hazard by placing people in proximity to the hazards associated with airport operations, and resulting in an increased potential for collisions between aircraft and wildlife, in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 14-4, set forth below, which was previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 14-4 would minimize impacts related to airport safety hazards due to actions taken by other public agencies in response to Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 14-4 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 14-4: *Projects implemented by other public agencies could be located within 2 miles of an airport, resulting in a safety hazard.*

- ◆ *Avoid creating hazardous wildlife attractants within a distance of 10,000 feet of an Airport Operations Area.*
- ◆ *Maintain a distance of 5 statute miles between the farthest edge of the Airport Operations Area and hazardous wildlife attractants.*

LL. Impact 5.10-4. Implementation of projects by other public agencies could interfere with emergency response access or with an adopted emergency response or evacuation plan.

The PEIR finds that the Delta Plan Amendments could cause a significant adverse impact related to physical interference with adopted emergency response plans or emergency evacuation plans in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance

measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measures 17-1 and 19-3, set forth below, which were previously adopted and incorporated into the Delta Plan, would apply to covered actions and are recommended to be implemented by other public agencies for non-covered actions. Mitigation Measures 17-1 and 19-3 would minimize impacts to adopted emergency response plans or emergency evacuation plans due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measures would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measures 17-1 and 19-3, or equally effective mitigation measures, is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 17-1: *Implementation of projects by other public agencies could interfere with emergency response access or with an adopted emergency response or evacuation plan.*

- ◆ *Establish construction fee schedules by local agencies for the new or modified facilities to fund additional emergency services potentially required during construction. If emergency services are not needed, a portion of the fees could be refunded.*
- ◆ *Develop worker training programs to reduce construction and operations risks.*
- ◆ *Develop appropriate emergency access routes and equipment for both land and water access, if applicable (such as in the Delta), that provides for adequate response time. If use of an existing emergency access route becomes limited due to new or modified facilities, additional routes or placement of duplicate equipment on each side of the route limitation could be considered.*
- ◆ *Develop traffic plans and emergency response plans for construction and operations phases of new facilities.*
- ◆ *Develop all facilities, including parks and ecosystem restoration areas, in accordance with applicable fire codes and regulations, and with adequate fire equipment access routes, occupancy limitations, and fire-protection equipment.*

2013 PEIR Mitigation Measure 19-3: *Implementation of projects by other public agencies could interfere with emergency response access or with an adopted emergency response or evacuation plan.*

- ◆ *Coordinate with responsible local agencies to establish appropriate emergency routes during construction activities and before existing emergency routes are reclassified to a nonemergency route use.*
- ◆ *Phase construction activities, and use multiple routes to and from offsite locations to minimize the daily amount of traffic on individual roadways.*
- ◆ *Post warnings about the potential presence of slow-moving vehicles.*

- ♦ *Use traffic-control personnel when appropriate.*
- ♦ *Place and maintain barriers, and install traffic-control devices necessary for safety, as specified in Caltrans' Manual of Traffic Controls for Construction and Maintenance Work Zones and in accordance with city and county requirements.*
- ♦ *Notify appropriate emergency service providers of project construction throughout the construction period to ensure that emergency access through construction areas is maintained.*

MM. Impact 5.10-5. Implementation of projects by other public agencies could include the use of equipment which could increase the risk of wildfires if not properly maintained or operated.

The PEIR finds that the Delta Plan Amendments could create a significant adverse impact related to an increased risk of wildfires from improperly maintained or operated equipment in both the Primary and Extended Planning Areas, though the risk of wildfire is considered to be low in the majority of the Primary Planning Area. In the Extended Planning Area, there is a greater risk that equipment and vehicles associated with the projects could come into contact with vegetated areas, potentially igniting dry vegetation and resulting in fire. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 14-5, set forth below, which was previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 14-5 would minimize the potential impacts from wildfire due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 14-5 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 14-5: *Implementation of projects by other public agencies could include the use of equipment which could increase the risk of wildfires if not properly maintained or operated.*

- ♦ *Prepare and implement a fire management plan to minimize potential for wildland fires.*

NN. Impact 5.10-6. Construction of facilities by other public agencies in response to the proposed amendments could create vector habitat that would pose a significant public health hazard.

The PEIR finds that the Delta Plan Amendments could cause a significant adverse impact by creating vector habitat that would pose a significant public health hazard in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 14-3, set forth below, which was previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 14-3 would minimize the potential impacts from vector habitat due to actions by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 14-3 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 14-3: *Construction of facilities by other public agencies in response to the proposed amendments could create vector habitat that would pose a significant public health hazard.*

- ◆ *Freshwater habitat management to include water-control-structure management, vegetation management, mosquito predator management, drainage improvements, and other best management practices, and coordination with the DFW and local mosquito and vector control agencies regarding these strategies and specific techniques to help minimize mosquito production.*
- ◆ *Maintenance of permanent ponds that increase the diversity of waterfowl yet decrease the introduction of vectors through constant circulation of water, vegetation control, and periodic draining of ponds.*
- ◆ *Tidal management focused on mosquito problems arising from the residual tidal and floodwaters remaining in depressions and cracked ground (Solano County Mosquito Abatement District (SCMAD), 2011. Site accessed February 6, 2011. <http://www.solanom mosquito.com>).*
- ◆ *Avoidance of ponding in tidal marsh habitat or in areas within the waterside of setback levees. Design of ecosystem restoration areas, waterfowl hunting areas, setback levees, parks, canals, and surface water storage facilities to minimize standing water, or use of other methods such as mosquito fish to reduce mosquito breeding.*

OO. Impact 5.11-1. Implementation of projects by other public agencies in response to the proposed amendments could result in the release of pollutants into surface and/or groundwater that could violate water quality standards or waste discharge requirements or substantially degrade water quality.

The PEIR finds that the Delta Plan Amendments could cause a significant adverse impact related to temporary changes in water quality in the Primary and Extended Planning Areas and long-term changes to water quality in the Extended Planning Area. While operational changes implemented by other public agencies in response to the proposed amendments have the potential to result in localized, adverse temporary impacts on water quality (salinity and dissolved oxygen) in the Primary Planning Area, real-time operations of the CVP and SWP would prevent potential salinity violations. Long-term changes in water temperatures and groundwater quality in the Extended Planning Area could result from higher flow objectives. Further, impacts due to constructed facilities and operations in the Extended Planning Area could also result in long-term changes to water quality. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 3-1, set forth below, which was previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 3-1 would minimize water quality violations and degradation of water quality due to actions by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 3-1 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 3-1: *Implementation of projects by other public agencies in response to the proposed amendments could result in the release of pollutants into surface and/or groundwater that could violate any water quality standards or waste discharge requirements or substantially degrade water quality.*

- ♦ *For construction of new facilities, all typical construction mitigation measures shall be required. Typical mitigation measures include the following construction-related Best Management Practices (BMPs):*
 - *Gravel bags, silt fences, etc., shall be placed along the edge of all work areas in order to contain particulates prior to contact with receiving waters.*
 - *All concrete washing and spoils dumping shall occur in a designated location.*
 - *Construction stockpiles shall be covered in order to prevent blowoff or runoff during weather events.*
 - *Severe weather event erosion control materials and devices shall be stored onsite for use as needed.*
 - *Soil stabilization, sediment control, wind erosion control, tracking control, non-storm water management, and waste management/materials pollution control.*
- ♦ *Apply other BMPs as determined necessary by the regulating entity (city, county).*
- ♦ *Any new facility with introduced impervious surfaces shall include stormwater control measures that are consistent with the Regional Water Quality Control Board (RWQCB) National Pollutant Discharge Elimination System (NPDES) municipal stormwater runoff requirements. The stormwater control measures shall be designed and implemented to reduce the discharge of stormwater pollutants to the maximum extent practical. Stormwater controls such as bioretention facilities, flow-through planters, detention basins, vegetative swales, covering pollutant sources, oil/water separators, and retention ponds shall be designed to control stormwater quality to the maximum extent practical.*
- ♦ *Mitigate sediment contaminant bioavailability impacts through (a) the exclusion of bird use or nesting areas from areas that may have excessive selenium or mercury; (b) minimization of methylmercury production; and/or (c) maximization of contaminant degradation before discharge of water, as appropriate.*

For any construction activities with the potential to cause in-river sediment disturbance associated with construction:

- ♦ *Apply BMPs to avoid or reduce temporary increases in suspended sediment. These BMPs for in-channel construction and levee disturbance may include, but are not limited to, silt curtains, cofferdams, the use of environmental dredges, erosion control on all inward levee slopes, and various levee-stabilization techniques, including revegetation. All construction sites will include preparation of a Storm Water Pollution Prevention Plan and BMPs designed to capture spills and prevent erosion to the waterbody. Turbidity shall be monitored up- and downstream of construction sites as a measure of impact.*
- ♦ *Apply bank stabilization BMPs, as needed, for any in-channel disturbance, such as:*
 - *A 100-foot vegetative or engineered buffer shall be maintained between the construction zone and surface water body.*
 - *Native and annual grasses or other vegetative cover shall be established on*

construction sites immediately upon completion of work causing disturbance, to reduce the potential for erosion close to a waterway or water body.

Dredging would be particularly prone to the production of re-suspended sediment and contaminants, but potential impacts could be reduced, but not necessarily fully mitigated through the use of submerged dredge cutter heads, silt curtains, and cofferdams, depending upon the site-specific soil conditions in the channel.

PP. Impact 5.11-2. Implementation of projects by other public agencies in response to the proposed amendments could substantially deplete groundwater supplies or substantially interfere with groundwater recharge.

The PEIR finds that the Delta Plan Amendments could result in significant adverse impacts related to temporary changes in groundwater levels and groundwater recharge. In the Primary Planning Area, groundwater levels are not expected to be impacted by operations of new conveyance projects in the Delta, but constructed facilities could cause permanent increases in impervious surfaces that would impair groundwater recharge. In the Extended Planning Area, impacts could include changes in groundwater levels and recharge due to the potential effects of new flow objectives on reservoir storage and surface water deliveries, which could in turn lead to an increase in the use of groundwater supplies. Many other storage and conveyance aspects of the Project are intended to improve groundwater recharge and groundwater levels; consequently, projects undertaken by local agencies as a result of the Project would likely benefit groundwater levels. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities (except that groundwater levels are not expected to be impacted by operations of new conveyance projects in the Primary Planning Area), and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 3-2, set forth below, which was previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 3-2 would minimize impacts to groundwater due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent, location, and implementation timing of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 3-2 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 3-2: *Implementation of projects by other public agencies in response to the proposed amendments could substantially deplete groundwater supplies or interfere substantially with groundwater recharge.*

- ◆ *Prior to construction, a survey should be made of all wells located adjacent to the construction site to determine location and depths of the wells and the groundwater surface. During construction of any project that requires dewatering of groundwater, monitoring wells should be installed adjacent to the groundwater dewatering wells or pumps. If the adjacent groundwater declines in a manner that would adversely affect adjacent wells following implementation of dewatering, the dewatering operations should be halted until the following measures are implemented:*
 - *Install sheet piles to reduce the area influenced by shallow groundwater level declines.*
 - *In case sheet piles are not an option and domestic well yields are affected, water supplies shall be trucked in to satisfy the well user's water supply needs.*
 - *If sheet piles are not effective and the impact on the well yield is important, such that the trucking in of water is not economically feasible, the affected well shall be deepened. Another option for a well that is deep enough would be to lower the pump bowl such that deepened water can be pumped out of the well. If these two options are not feasible, a new, deeper, replacement well shall be installed for groundwater production.*

QQ. Impact 5.11-3. Implementation of projects by other public agencies in response to the proposed amendments could substantially change water supply availability to users of Delta water or require new or expanded entitlements.

The PEIR finds that the Delta Plan Amendments could cause a significant adverse impact related to a change in water supply availability to water users of Delta water in the Primary and Extended Planning Areas. In the Primary Planning Area, any construction activities would be temporary and it is expected that existing water supply operations could continue unimpeded during construction. Projects in response to the proposed amendments would be operated to allow water rights holders to continue to receive supplies according to their water rights; therefore, the Project would not require new or expanded entitlements. In the Extended Planning Area, the Project has the potential to impact water supply availability to users of Delta water due to higher flow objectives. On the other hand, many of the physical infrastructure projects under the Project are intended to improve these same water supplies. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measures 3-1 and 3-2, set forth above in the discussion of Impacts 5.11-1 and 5.11-2, respectively, and previously adopted and incorporated into the Delta Plan, would apply to covered actions and are recommended to be implemented by other public agencies for non-covered actions. Mitigation Measures 3-1 and 3-2 would minimize

impacts to water quality and to groundwater. However, because the extent, implementation timing, and location of such actions are not yet known, it is not possible to conclude that the mitigation measures would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measures 3-1 and 3-2, or equally effective mitigation measures, is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

RR. Impact 5.11-4. Implementation of projects by other public agencies in response to the proposed amendments could substantially increase the rate or amount of surface runoff in a manner which would exceed the capacity of existing or planned stormwater drainage systems and/or result in flooding on- or off-site.

The PEIR finds that the Delta Plan Amendments could create a significant adverse impact related to temporarily or permanently changing drainage patterns and contributing surface runoff that could exceed existing or planned stormwater drainage systems and/or create or increase on- or off-site flooding in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measures 5-1 and 5-2, set forth below, which were previously adopted and incorporated into the Delta Plan, would apply to covered actions and are recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 5-1 and 5-2 would minimize adverse surface runoff impacts due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measures would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measures 5-1 and 5-2, or equally effective mitigation measures, is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 5-1: *Implementation of projects by other public agencies in response to the proposed amendments could substantially increase the rate or amount of surface runoff in a manner which would exceed the capacity of existing or planned stormwater drainage systems and/or result in flooding on- or off-site.*

- ♦ *Prepare a drainage or hydrology and hydraulic study that would assess the need and provide a basis for the design of drainage-related mitigation, such as new onsite drainage systems or new cross drainage facilities. Prepare the study in accordance with applicable standards of Federal Emergency Management Agency (FEMA), USACE, state Department of Water Resources (DWR), Central Valley Flood Protection Board (CVFPB), as well as the local reclamation districts and flood control agencies and the*

counties and cities. Design subsequent mitigation measures in accordance with the final study and with the applicable standards of FEMA, USACE, DWR, and CVFPB. The study would identify potential increases in flood risks, including those that may result from new facilities.

- ◆ *Provide temporary drainage bypass facilities that would reroute drainage around, along, or over the Proposed Project facilities and construction sites. The temporary bypass facilities would be designed in accordance with the results and recommendations of a drainage or hydrologic and hydraulic study and would be in place and fully functional until long-term replacement facilities are completed.*
- ◆ *Provide onsite stormwater detention storage at construction and project facility sites that would reduce project-caused short- or long-term increases in drainage runoff. The storage space placement and capacity would be designed based on the drainage or hydrologic and hydraulic study.*
- ◆ *Based on the results of the drainage or hydrologic and hydraulic study, arrange the length of any stockpiles or other construction features in the direction of the floodplain flow to maximize surface flows under flood flow conditions.*
- ◆ *At in-stream construction sites that might reduce channel capacity, install setback levees or bypass channels to maintain channel capacity and to mitigate hydraulic impacts.*
- ◆ *Where low channel velocities might result from construction, implement a sediment management program in order to maintain channel capacity.*
- ◆ *Provide cross drainage, replacement drainage paths and facilities, and enlarged flow paths to reroute drainage around, under, or over the Proposed Project facilities and to restore the function of any affected existing drainage or flow paths and facilities.*
- ◆ *Channel modifications for restoration actions would be required to be implemented to maintain or improve flood management functions and would be coordinated with the USACE, DWR, CVFPB, and other flood control agencies to assess the desirability and feasibility for channel modifications. To the extent consistent with floodplain land uses and flood control requirements, if applicable, woody riparian vegetation would be allowed to naturally establish.*
- ◆ *For areas that would be flooded as a result of the project, or where existing flooding would be increased in magnitude, frequency, or duration, purchase a flowage easement and/or property at the fair-market value.*
- ◆ *Provide a long-term sediment removal program at in-river structures.*
- ◆ *To mitigate potential impacts of changes in the timing of reservoir releases or the possible combination of river peak flows, use forecasts to implement coordination of operations with existing reservoirs.*

2013 PEIR Mitigation Measure 5-2: *Implementation of projects by other public agencies in response to the proposed amendments could substantially increase the rate or amount of surface runoff in a manner which would exceed the capacity of existing or planned stormwater drainage systems and/or result in flooding on- or off-site.*

- ◆ *Prepare a drainage or hydrology and hydraulics study that would assess the need and provide a basis for the design of drainage-related mitigations, such as new onsite drainage systems or new cross drainage facilities. Prepare the study in accordance with applicable standards of FEMA, USACE, DWR, CVFPB, as well as the local reclamation districts and flood control agencies and the counties and cities. Design subsequent mitigation measures in accordance with the final study and with the applicable standards of FEMA, USACE, DWR, and CVFPB.*
- ◆ *Provide onsite stormwater detention storage at construction and project facility sites that would reduce project-caused, short- and long-term increases in drainage runoff. The storage space would be designed based on the drainage or hydrologic and hydraulic study.*

SS. Impact 5.11-5. Implementation of projects by other public agencies in response to the proposed amendments could expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam.

The PEIR finds that the Delta Plan Amendments could cause a significant adverse impact related to an increased risk of exposing people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam, in both the Primary and Extended Planning Areas. However, these flooding risks would be unlikely to persist beyond project construction. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 5-4, set forth below, which was previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 5-4 would minimize the risk of exposing people or structures to a significant risk of loss, injury, or death involving flooding due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent, implementation timing, and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 5-4 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 5-4: *Implementation of projects by other public agencies in response to the proposed amendments could expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.*

- ◆ *Prepare a drainage or hydrology and hydraulics study that would assess the need and provide a basis for the design of drainage-related mitigations, such as new onsite drainage systems or new cross drainage facilities. Prepare the study in accordance with applicable standards of FEMA, USACE, DWR, CVFPB, as well as the local reclamation districts and flood control agencies and the counties and cities. Design subsequent mitigation measures in accordance with the final study and with the applicable standards of FEMA, USACE, DWR, and CVFPB.*
- ◆ *Where high channel velocities might result from construction, provide bank protection, such as rip rap, to protect levees from erosion.*
- ◆ *Where construction results in longer channel wind fetch lengths, install vegetative buffer zones or wave erosion protection on the water side slope of levees, such as rock or grouted rip rap, and increase levee freeboard to address higher wind and wave runup.*
- ◆ *Based on the drainage or hydrology and hydraulics study, determine any resulting changes to available evacuation plans or emergency response times.*
- ◆ *To reduce emergency response times and public safety risks, raise structures and major roads out of the floodplain.*
- ◆ *Provide automated flood warning systems.*
- ◆ *Develop and implement area-specific evacuation and emergency response plans.*
- ◆ *Considering the results of the hydraulics study noted above, perform a seepage and stability analyses that would assess the need and act as a basis for design of other seepage- and stability-related mitigations, such as cutoff walls, adjacent levees, setback levees, berms, and subdrainage features. Perform the analyses in accordance with applicable standards of FEMA, USACE, and DWR.*
- ◆ *Perform research and collect subsurface information in accordance with applicable standards of FEMA, USACE, and DWR and perform settlement analyses that would assess the need for monitoring and potential settlement-related mitigations, such as ground improvement or pre-construction surcharging. Perform the analyses in accordance with applicable standards of USACE.*
- ◆ *Perform research and collect subsurface information in accordance with applicable standards of FEMA, USACE, and DWR and perform seismic and liquefaction analyses that would assess the need and provide the basis for design of other seismic-related mitigations, such as ground improvement. Perform the analyses in accordance with applicable standards of USACE and American Society of Civil Engineers and Southern California Earthquake Center.*
- ◆ *Prepare and implement a plan for periodic maintenance, inspections, repair, and rehabilitation of new water storage and conveyance facilities that could cause flooding upon failure.*
- ◆ *Provide redundancy and safety controls and devices on water storage and conveyance facilities (pump stations, canals, and tunnels) to protect against facility failure and subsequent flooding.*
- ◆ *To limit flooding from the unlikely event of a conveyance facility failure, limit extensive flow escape with installation of safety devices such as gated checks.*
- ◆ *Construct new evacuation roads and access roads, as necessary.*

- ♦ *Conduct Golden Guardian emergency drills.*

TT. Impact 5.11-6. Implementation of projects by other public agencies in response to the proposed amendments could cause inundation by seiche, tsunami, or mudflow.

The PEIR finds that the Delta Plan Amendments could result in significant adverse impacts related to an increased risk of inundation by seiche in both the Primary and Extended Planning Areas and an increased risk of inundation by mudflow in the Extended Planning Area. Tsunamis and mudflows are not a risk in the Primary Planning Area. Further, any project in the Extended Planning Area located along the coast could be subject to tsunamis; however, it is not anticipated that any actions by other public agencies in response to the Project could cause or increase inundation by tsunami. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 5-5, set forth below, which was previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 5-5 would minimize significant flood impacts due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent, implementation timing, and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 5-4 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 5-5: *Implementation of projects by other public agencies in response to the proposed amendments could cause inundation by seiche, tsunami, or mudflow.*

- ♦ *Prepare a drainage or hydrology and hydraulics study that would assess the need and provide a basis for the design of drainage-related mitigations, such as new onsite drainage systems or new cross drainage facilities. Prepare the study in accordance with applicable standards of FEMA, USACE, DWR, CVFPB, as well as the local reclamation districts and flood control agencies and the counties and cities. Design subsequent mitigation measures in accordance with the final study and with the applicable standards of FEMA, USACE, DWR, and CVFPB. Provide temporary drainage bypass facilities that would reroute drainage around, along, or over the Proposed Project facilities and construction sites. The temporary bypass facilities would be designed in accordance with*

drainage or hydrology and hydraulic study and would be in place and fully functional until long-term replacement facilities are completed.

- ◆ *Based on the results of the drainage or hydrologic and hydraulic study, arrange the length of any stockpiles or other construction features in the direction of the floodplain flow to maximize surface flows under flood conditions.*
- ◆ *At in-stream construction sites that might reduce channel capacity, install setback levees or bypass channels to maintain channel capacity and to mitigate hydraulic impacts.*
- ◆ *Provide cross drainage, replacement drainage paths and facilities, and enlarged flow paths to reroute drainage around, under, or over the Proposed Project facilities and to restore the function of any affected existing drainage or flow paths and facilities.*
- ◆ *Channel modifications for restoration actions would be required to be implemented to maintain or improve flood management functions and would be coordinated with the USACE, DWR, CVFPB, and other flood control agencies to assess the desirability and feasibility for channel modifications. To the extent consistent with floodplain land uses and flood control requirements, if applicable, woody riparian vegetation would be allowed to naturally establish.*

UU. Impact 5.11-7. Climate change, including sea-level rise, could conflict with the operation of projects implemented by other public agencies in response to the proposed amendments.

The PEIR finds that climate change and sea-level rise could create a significant adverse impact related to conflicts with the operation of projects implemented by other public agencies in response to the Delta Plan Amendments in both the Primary and Extended Planning Areas. These impacts could be caused by the interaction of climate change with constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measures 21-2 and 21-4, set forth below, which were previously adopted and incorporated into the Delta Plan, would apply to covered actions and are recommended to be implemented by other public agencies for non-covered actions. Mitigation Measures 21-2 and 21-4 would minimize impacts of climate change, including sea-level rise, on the operation of projects due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent, implementation timing, and location of such actions are not yet known, it is not possible to conclude that the mitigation measures would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measures 21-2 and 21-4, or equally effective mitigation measures, is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 21-2: *Climate change, including sea-level rise, could conflict with the operation of projects by other public agencies in response to the proposed amendments.*

- ◆ *Prepare a drainage or hydrology and hydraulics study that would assess the need and provide a basis for the design for flood protection of the facilities constructed along waterways. Prepare the study in accordance with applicable standards of Federal Emergency Management Agency (FEMA), USACE, DWR, Central Valley Flood Protection Board, San Francisco Bay Conservation and Development Commission (BCDC), as well as the local reclamation districts and flood control agencies and the counties and cities. Design subsequent mitigation measures in accordance with the final study and with the applicable standards of FEMA, USACE, DWR, Central Valley Flood Protection Board, and BCDC.*
- ◆ *Design intakes/diversions and outfalls to be operated at multiple surface water elevations between existing conditions and maximum projected surface water elevations during a high flow event with sea level rise for the life of the facility.*
- ◆ *Prepare a hydrogeologic study that would assess long-term groundwater recharge and safe yield of wells and wellfields under a sustainable groundwater management plan. If the wells can be used to a greater degree in some years in a manner that would support the sustainable groundwater management plan to avoid long-term groundwater overdraft, wells could be drilled to deeper depths than would be required under existing conditions.*

2013 PEIR Mitigation Measure 21-4: *Climate change, including sea-level rise, could conflict with the operation of projects by other public agencies in response to the proposed amendments.*

- ◆ *Prepare a drainage or hydrology and hydraulics study that would assess the need and provide a basis for the design for projects that reduce risks of floods in the Delta. Prepare the study in accordance with applicable standards of FEMA, USACE, DWR, and BCDC. Design subsequent mitigation measures in accordance with the final study and with the applicable standards of FEMA, USACE, DWR, Central Valley Flood Protection Board, and BCDC.*
- ◆ *Based on the results of the drainage or hydrologic and hydraulic study, arrange the length of flood management facilities in the direction of the floodplain flow to maximize surface flows under flood conditions.*
- ◆ *Install setback levees or bypass channels to maintain channel capacity and to mitigate hydraulic impacts of high flow events and higher surface water elevations due to climate change and sea level rise.*
- ◆ *Channel modifications for restoration actions would be required to be implemented to maintain or improve flood management functions and would be coordinated with the USACE, DWR, Central Valley Flood Protection Board, BCDC, and other flood control agencies to assess the desirability and feasibility for channel modifications. To the extent consistent with floodplain land uses and flood control requirements, if applicable, woody riparian vegetation would be allowed to naturally establish.*

VV. Impact 5.12-1. Implementation of projects by other public agencies in response to the proposed amendments could conflict with a land use plan, policy, or regulation adopted to avoid or mitigate an environmental effect.

The PEIR finds that the Delta Plan Amendments could result in significant adverse impacts in both the Primary and Extended Planning Areas related to conflicts with land use plans, policies, and regulations meant to reduce environmental impacts. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measures 3-1 and 4-1, set forth above in the discussion of Impacts 5.11-1 and 5.3-2, respectively, and 2013 PEIR Mitigation Measure 6-2, set forth below, all of which were previously adopted and incorporated into the Delta Plan, would apply to covered actions and are recommended to be implemented by other public agencies for non-covered actions. Mitigation Measures 3-1, 4-1, and 6-2 would minimize construction-related impacts caused by work required for land use plan compliance due to actions taken by other public agencies in response to Delta Plan Amendments. Mitigation Measure 3-1 would minimize impacts to water quality due to actions taken by other public agencies in response to Delta Plan Amendments. Mitigation Measure 4-1 would minimize impacts to sensitive natural communities due to actions taken by other public agencies in response to Delta Plan Amendments. Mitigation Measure 6-2 would minimize conflicts with applicable land use plans, policies, and regulations due to actions taken by other public agencies in response to Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measures would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measures 3-1, 4-1, and 6-2, or equally effective mitigation measures, is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 6-2: *Implementation of projects by other public agencies in response to the proposed amendments could conflict with a land use plan, policy, or regulation adopted to avoid or mitigate an environmental effect.*

- ♦ *Compensate for the loss or reduction in environmental values protected by the subject plan or policy. For example, if the project would result in conversion of agricultural land to a non-agricultural use, potential mitigation actions could include:*
 - *Recording a deed restriction that ensures permanent conservation and mitigation on other property of equal or greater environmental mitigation value;*
 - *Creating a buffer or barrier between uses;*
 - *Redesigning the project or selecting an alternate location that avoids or mitigates the impact; and/or*

- *Restoring disturbed land to conditions to provide equal or greater environmental value to the land affected by the covered action.*

WW. Impact 5.12-2. Implementation of projects by other public agencies in response to the proposed amendments could physically divide an established community.

The PEIR finds that the Delta Plan Amendments could cause significant adverse impacts related to the division of established communities, isolation of industry from services within communities, and disruption of development patterns in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 6-1, set forth below, which was previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 6-1 would minimize physical division of an established community due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 6-1 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 6-1: *Implementation of projects by other public agencies in response to the proposed amendments could physically divide an established community.*

- ♦ *Minimize physical division of existing established communities or residential areas by designing new facilities and infrastructure to be located underground or with sufficient points of visual and physical access. Examples of methods of minimizing physical division include (but are not limited to):*
 - *Burying or visually masking new infrastructure or facilities;*
 - *Restoring disturbed landscapes back to preconstruction conditions;*
 - *Reestablishing access (e.g., reconnecting roads, rebuilding bridges);*
 - *Relocating landmark buildings; or*
 - *Implementing other feasible mitigation to reduce the disturbance to a community's physical composition, visual character, or other features integral to the community's identity.*

XX. Impact 5.13-1. Activities associated with construction of projects by other public agencies in response to the proposed amendments could expose people to noise levels in excess of standards established in applicable plans and ordinances.

The PEIR finds that the Delta Plan Amendments could cause significant adverse impacts related to exposing people to elevated noise levels from construction in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 15-1, set forth below, which was previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 15-1 would minimize conflicts with local noise standards due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 15-1 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 15-1: *Activities associated with construction of projects by other public agencies in response to the proposed amendments could expose people to noise levels in excess of standards established in applicable plans and ordinances.*

- ♦ *Limit the hours of operation at noise-generation sources located near or adjacent to noise-sensitive areas, wherever practicable, to reduce the level of exposure to meet applicable local standards.*
- ♦ *Locate construction equipment away from sensitive receptors, to the extent feasible, to reduce noise levels below applicable local standards.*
- ♦ *Maintain construction equipment to manufacturers' recommended specifications, and equip all construction vehicles and equipment with appropriate mufflers and other approved noise-control devices.*
- ♦ *Limit idling of construction equipment to the extent feasible to reduce the time that noise is emitted.*
- ♦ *Conduct individual traffic noise analysis of identified haul routes and provide mitigation, such as reduced speed limits, at locations where noise standards cannot be maintained for sensitive receptors.*
- ♦ *Incorporate use of temporary noise barriers, such as acoustical panel systems, between construction activities and sensitive receptors if it is concluded that they would be effective in reducing noise exposure to sensitive receptors.*

- ◆ *Near sensitive receptors, avoid or minimize use of construction equipment known to generate high levels of groundborne vibration (for example, pile drivers).*

YY. Impact 5.13-2. Activities associated with construction of projects by other public agencies in response to the proposed amendments could result in a substantial temporary increase in ambient noise levels.

The PEIR finds that the Delta Plan Amendments could cause significant adverse impacts related to causing a substantial (10 dBA or more) temporary increase in ambient noise levels in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 15-1, set forth above in the discussion of Impact 5.13-1 and previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 15-1 would minimize construction noise levels due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 15-1 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

ZZ. Impact 5.13-3. Activities associated with the construction of projects by other public agencies in response to the proposed amendments could expose sensitive receptors to excessive groundborne vibrations.

The PEIR finds that the Delta Plan Amendments could cause significant adverse impacts related to exposing sensitive receptors to excessive groundborne vibrations in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 15-2, set forth below, which was previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 15-2 would minimize groundborne vibration due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would

reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 15-2 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 15-2: *Activities associated with the construction of projects by other public agencies in response to the proposed amendments could expose sensitive receptors to excessive groundborne vibrations.*

- ♦ *Conduct a preliminary groundborne vibration analysis report to determine future construction-related groundborne vibration levels based on, but not limited to, a detailed equipment list, hours of operation and distances to sensitive receptors located within 500 feet of project sites.*
- ♦ *Provided that future groundborne vibration results in significant impacts at sensitive receptors, the following measures shall be implemented:*
 - *Designate a complaint coordinator and post this person's contact information in a location near construction areas where it is clearly visible to the nearby receptors most likely to be affected. The coordinator will manage complaints and concerns resulting from activities that cause vibrations. The severity of the vibration concern should be assessed by the coordinator and, if necessary, evaluated by a qualified noise and vibration control expert.*
 - *Vibration monitoring will be conducted before and during vibration generating operations occurring within 100 feet of historic structures. Every attempt will be made to limit construction-generated vibration levels during pile driving and other groundborne noise and vibration-generating activities in the vicinity of historic structures in accordance with recommendations of the appropriate agency with authority.*
 - *Adjacent historic features will be covered or temporarily shored, as necessary, for protection from vibrations, in consultation with the appropriate cultural resources authority.*
 - *Pile driving required within a 50-foot radius of residences will use alternative installation methods where possible (e.g., pile cushioning, jetting, predrilling, cast-in-place systems, resonance-free vibratory pile drivers). This would reduce the number and amplitude of blows required to seat the pile.*
 - *Pile-driving activities conducted within 285 feet of sensitive receptors will occur during daytime hours to avoid sleep disturbance during evening and nighttime hours.*

AAA. Impact 5.13-4. Operation of projects by other public agencies in response to the proposed amendments could expose people to noise levels in excess of standards established in applicable plans and ordinances.

The PEIR finds that the Delta Plan Amendments could cause significant adverse impacts related to the operation of projects exposing people to elevated noise levels in both the Primary and Extended Planning Areas. These impacts could be caused by constructed facilities and their

operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 15-3, set forth below, which was previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 15-3 would minimize conflicts with local noise standards due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 15-3 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 15-3: *Operation of projects by other public agencies in response to the proposed amendments could expose people to noise levels in excess of standards established in applicable plans and ordinances.*

- ◆ *Identify noise-sensitive receptors in the vicinity of project activities and design projects to minimize exposure of sensitive receptors to long-term, operational noise sources (for example, water pumps) to reduce noise levels below applicable local standards.*
- ◆ *Conduct a preliminary noise analysis report to determine future operation-related noise and distances to sensitive receptors. Provided that future operation-related noise results in significant at sensitive receptors, incorporate into construction design measures such as a structure encasing the new noise generating infrastructure. Materials (masonry brick, metal shed, wood) used to house the infrastructure will be of solid construction and void of gaps at the ground, roof line, and joints. All vents will include acoustically rated louvers.*
- ◆ *Locate dog parks no closer than 200 feet from the nearest residential property line and at least 75 feet from habitat for noise-sensitive wildlife species.*
- ◆ *Locate parking lots no closer than 65 feet from the nearest residential property line and at least 25 feet from habitat for noise-sensitive wildlife species unless a detailed noise study is conducted that determines that placement of parking lots closer than the distances specified above will not result in noise levels that exceed 67 dBA at the nearest residential property line or 60 dBA from noise-sensitive habitat, or appropriate mitigation measures, including permanent noise barriers, can be incorporated to reduce noise levels to equal the ambient noise level or referenced thresholds for residential property and noise sensitive habitat.*
- ◆ *Locate playing fields no closer than located at least 125 feet from the nearest residential property line and at least 50 feet from habitat for noise-sensitive wildlife species unless a detailed noise study is conducted that determines that placement of playing fields closer*

than the distances specified above will not result in noise levels that exceed 67 dBA at the nearest residential property line or 60 dBA from noise-sensitive habitat, or appropriate mitigation measures, including permanent noise barriers, can be incorporated to reduce noise levels to equal the ambient noise level or referenced thresholds for residential property and noise sensitive habitat.

BBB. Impact 5.13-5. Operation of projects by other public agencies in response to the proposed amendments could result in a substantial permanent increase in ambient noise levels.

The PEIR finds that the Delta Plan Amendments could create a significant adverse impact related to a substantial (5 dBA) long-term or permanent increase in ambient noise levels in both the Primary and Extended Planning Areas. These impacts could be caused by constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 15-3, set forth above in the discussion of Impact 5.13-4 and previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 15-3 would minimize conflicts with local noise standards due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 15-3 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

CCC. Impact 5.13-6. Operation of projects by other public agencies in response to the proposed amendments could expose sensitive receptors to excessive groundborne vibrations.

The PEIR finds that the Delta Plan Amendments could cause significant adverse impacts as a result of the operation or projects exposing sensitive receptors to excessive groundborne vibrations in both the Primary and Extended Planning Areas. These impacts could be caused by constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 15-2, set forth above in the discussion of Impact 5.13-3 and previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 15-2 would minimize groundborne vibration due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 15-2 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

DDD. Impact 5.15-1. Implementation of projects by other public agencies in response to the proposed amendments could directly impair, degrade, or eliminate recreational resources, facilities, and opportunities.

The PEIR finds that the Delta Plan Amendments could cause temporary, long-term, or permanent significant adverse impacts related to the impairment, degradation, and elimination of recreational facilities, opportunities, and resources in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 18-1, set forth below, which was previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 18-1 would minimize impairment, degradation, or elimination of recreational resources due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 18-1 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 18-1: *Implementation of projects by other public agencies in response to the proposed amendments could directly impair, degrade, or eliminate recreational resources, facilities, and opportunities.*

- ♦ *If the substantial impairment, degradation, or elimination of recreational facilities occurs, replacement facilities of equal capacity and quality with ongoing funding provided for maintenance of these facilities.*
- ♦ *If degradation or impairment of recreational facilities, settings, and activities occur from implementation of water use efficient practices and water conservation measures at*

recreational areas, the park and recreation areas shall be redeveloped with drought-tolerant plant materials, water efficient irrigation systems, and synthetic turf substitutes where appropriate, in such a way as to retain recreational facilities and use areas.

- ♦ *If the volume of water exported from the Delta declines over multiple years, the lead agencies that implement local water supplies may be unable to develop a long-term replacement water supply for the south-of-Delta surface water reservoirs with recreation uses. At these sites, facilities must be modified (including access facilities, as necessary) to accommodate lower water elevations or more frequent fluctuations in water elevations that could occur more frequently in the Proposed Project than under existing conditions.*

EEE. Impact 5.15-2. Implementation of projects by other public agencies in response to the proposed amendments could include the alteration of recreational resources or facilities or require the construction or expansion of recreational facilities that could result in environmental impacts.

The PEIR finds that the Delta Plan Amendments could result in significant adverse impacts related to the construction and modification of recreational facilities and associated impacts on the environment in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measures 3-1, 4-1, and 11-4, set forth above in the discussion of Impacts 5.11-1, 5.3-2, and 5.9-4, respectively, and Mitigation Measure 18-3, set forth below, all of which were previously adopted and incorporated into the Delta Plan, would apply to covered actions and are recommended to be implemented by other public agencies for non-covered actions. Mitigation Measures 3-1, 4-1, 11-4, and 18-3 would minimize impacts from construction and expansion of recreational facilities due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measures would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measures 3-1, 4-1, 11-4, and 18-3, or equally effective mitigation measures, is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 18-3: *Implementation of projects by other public agencies in response to the proposed amendments could include alteration of recreational resources or facilities or require the construction or expansion of recreational facilities that could result in environmental impacts.*

- ♦ *Projects shall be sited in areas that would have minimal adverse physical effect on the environment.*

- ◆ *Where impacts to the environment are unavoidable, compensate for impacts through mitigation, restoration, or preservation off-site, or creation of additional permanent new replacement facilities.*

FFF. Impact 5.15-3. Implementation of projects by other public agencies in response to the proposed amendments could increase the use of existing recreational resources and facilities such that substantial physical deterioration would occur or be accelerated.

The PEIR finds that the Delta Plan Amendments could result in a significant adverse impact related to temporary and permanent displacement of recreationists to other facilities and the acceleration of the physical deterioration of those facilities in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 18-2, set forth below, which was previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 18-2 would minimize impacts associated with deterioration of recreational facilities due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 18-2 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 18-2: *Implementation of projects by other public agencies in response to the proposed amendments could increase the use of existing recreational resources and facilities such that substantial physical deterioration would occur or be accelerated.*

- ◆ *If substantial temporary or permanent impairment, degradation, or elimination of recreational facilities causes users to be directed towards other existing facilities, lead agencies shall coordinate with impacted public and private recreation providers to direct displaced users to under-utilized recreational facilities.*
- ◆ *Lead agencies shall provide additional operations and maintenance of existing facilities in order to prevent deterioration of these facilities.*
- ◆ *If possible, lead agencies shall provide temporary replacement facilities.*
- ◆ *If the increase in use is temporary, once use is decreased back to existing conditions, degraded facilities shall be rehabilitated or restored.*

- ◆ *Where impacts to existing facilities are unavoidable, compensate for impacts through mitigation, restoration, or preservation off-site, or creation of additional permanent new replacement facilities.*

GGG. Impact 5.16-1. Implementation of projects by other public agencies in response to the proposed amendments could conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system.

The PEIR finds that the Delta Plan Amendments could cause significant adverse impacts related to conflicts with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system in the Primary and Extended Planning Areas. Impacts could include road closures or relocation, increased traffic congestion from an increase in the numbers of trucks at intersections and on road segments, temporary railroad track closures and rerouting of passengers and freight, and potential impacts on navigation. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 19-1, set forth below, which was previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 19-1 would minimize impacts on the circulation system due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 19-1 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 19-1: *Implementation of projects by other public agencies in response to the proposed amendments could conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system.*

- ◆ *Avoid modifications to federal, State, and county highways, local roadways, and bridges that may reduce vehicle capacity, to the extent feasible.*
- ◆ *Develop and implement a traffic control plan to reduce effects of roadway construction activities, including full and partial lane closures, bicycle and pedestrian facility closures, and reduced access to adjacent properties. Minimize lane closures during morning and evening peak hours. Limit lane closures near the affected segment. Reroute bicycle and pedestrian access around the project area. Prevent bicyclists and pedestrians from entering the work area.*

- ◆ *As part of the traffic control plan, identify specific project-vehicle access routes that would avoid additional traffic in residential areas or would adversely affect other sensitive land uses, where feasible.*
- ◆ *Install roadway status signs at strategic locations in the Delta to inform the public of roadway closures and limits to ingress to/egress from Delta Islands. The signs shall include maps showing the relative locations of road closures and access restrictions to other Delta features.*
- ◆ *For project operations that increase traffic, prepare a traffic study. Determine haul routes that would be used. Evaluate the levels of service at affected intersections and road segments during the peak a.m. and peak p.m. periods. Model changes in traffic with project traffic. If the level of service is maintained at levels acceptable to the appropriate agency, then no additional mitigation is required. If project traffic causes an intersection or road segment to perform below the minimum level of service standard, then select an alternate route for project traffic or schedule project trips for non-peak-hour periods. If alternate routes are not feasible, then design and construct facility improvements to intersections or road segments to maintain the acceptable level of service.*
- ◆ *During the planning and analysis of site-specific actions, coordinate with Caltrans and/or other local agencies with jurisdiction over transportation system features for the purpose of minimizing impacts on bridges, roadways, culverts, or other features that may be affected. Agencies responsible for constructing and maintaining levees on which a public roadway may be located shall also be consulted to ensure consistency with levee design criteria.*
- ◆ *For roads that will be flooded during floodplain operation, prepare and implement vehicular traffic detour planning as necessary. Provide convenient and parallel vehicular traffic detours for routes closed because of inundation. A detour plan shall be prepared and implemented in accordance with current Caltrans Standard Plans and Specifications. (A temporary crossing structure, for example a Bailey Bridge, may be used to maintain circulation and avoid a detour plan.) The detour plan shall be implemented before roadway inundation.*

The detour plan will include an assessment of existing roadway conditions, whether paved or unpaved, and provisions for repair and maintenance if the roadway conditions are substantially degraded from increased use. After the detour route is identified and before flood flows are released that would overtop roads, the condition of the detour road surface will be assessed and documented. The documentation will be submitted to the local agency responsible for maintenance of the road. After the detour is no longer needed, the condition of the road surface will be assessed and documented. The documentation will identify substantial changes in the condition of the road surface, such as potholing or rutting. Repair and maintenance actions needed to restore the road surface to predetour conditions will be identified. In coordination with the local maintenance agency, the repair and maintenance actions may be conducted by the agency conducting the floodplain operation or by the local maintenance agency to be proportionately reimbursed by the flood management authority.

The detour plan will prioritize paved roads for use as detour routes. If use of paved roadway detours is not feasible during flood flow road inundation periods, the detour plan will require that visible dust emissions from unpaved detour routes will be limited to the percent

opacity indicated by the appropriate air pollution control district. The following dust control measures may be used to stabilize unpaved roadways:

- *Watering*
- *Uniform layer of washed gravel*
- *Roadmix*
- *Paving*
- *Any other method that can be demonstrated to the satisfaction of the appropriate air pollution control district that effectively limits visible dust emission to the local percent opacity standard and meets the conditions of a stabilized unpaved road.*
- ♦ *Traffic impact reports shall be prepared that meet the applicable agencies' standards to assess potential impacts on appropriate street segments and intersections. The traffic impact reports shall identify impacts that exceed the agencies' guidelines for significance and identify appropriate mitigation. Acceptable mitigation measures may include:*
 - *Turn restrictions*
 - *Roadway widening to add lanes or shoulders*
 - *Redesign of freeway on- and off-ramps*
 - *Median construction/modification to restrict access*
 - *Flaring of intersections to add turn lanes*
 - *Provision of passing lanes or turnouts*
 - *Acceleration and deceleration lanes*
 - *Removal of obstructions*
 - *Roundabouts*
 - *Restriping to add lanes with or without parking removal and restrictions*
 - *Protected left-turn pockets or free right-turn lanes*
 - *Parking restrictions, daily or during peak hours*
 - *Fair share contributions to approved projects identified in the agency's Capital Improvement Plan*
 - *Fair share contributions to traffic signals identified in the agency's traffic signal plan.*
- ♦ *Prepare and implement a waterway traffic control plan to ensure safe and efficient vessel navigation during construction in waterways. The plan shall identify vessel traffic control measures to minimize congestion and navigation hazards to the extent feasible. Construction areas in the waterway will be barricaded or guarded by readily visible barriers or other effective means to warn boaters of their presence and restrict access. Warning devices and signage will be consistent with the California Uniform State Waterway Marking System and effective during nondaylight hours and periods of dense fog.*
- ♦ *Where temporary partial channel closure is necessary, a temporary channel closure plan shall be developed. The waterway closure plan will identify and implement alternate detour routing and procedures for notifying boaters of construction activities and partial*

closures, including coordination with the U.S. Coast Guard, local boating organizations and marinas.

- ♦ *To the extent feasible, ensure that safe boat access to public launch and docking facilities, businesses, and residences is maintained.*
- ♦ *Coordinate with transit system operators to establish appropriate alternate transit system routes to be rerouted during construction activities, as appropriate.*
- ♦ *Boat passage facilities shall be provided as an integral component of operable gate facilities, when feasible. Boat passage facilities shall be designed to provide uninterrupted boat passage when gate are in the “up” position. Floating docks with mooring bits shall be provided along the shoreline on both sides of the boat passage facility for boaters to use while they await passage. Floating barriers will guide boats into the passage facility chambers.*
- ♦ *Implement a program to provide boater education on procedures for waiting at and using the boat passage facility.*
- ♦ *Minimize impacts on bicycle and pedestrian circulation where feasible by avoiding impacts, minimizing closure of paths, and providing for temporary or permanent relocation of the facility to the extent feasible. Consult with the appropriate public works department to determine the most feasible alignment for facility relocation.*

HHH. Impact 5.16-2. Implementation of projects by other public agencies in response to the proposed amendments could substantially increase hazards due to a design feature or incompatible uses.

The PEIR finds that the Delta Plan Amendments could create a significant adverse impact to navigation in waterways and deep water channels by causing an increased risk of exposing boaters navigating in the channels to additional hazards, such as debris, increased water velocities, or collisions with other vessels or structures, in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 19-1, set forth above in the discussion of Impact 5.16-1, and 2013 PEIR Mitigation Measure 19-2, set forth below, both of which were previously adopted and incorporated into the Delta Plan, would apply to covered actions and are recommended to be implemented by other public agencies for non-covered actions. Mitigation Measures 19-1 and 19-2 would minimize hazards due to a design feature of waterways and deep water channels due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measures would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measures 19-1 and 19-2, or equally effective mitigation measures, is within the responsibility

and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 19-2: *Implementation of projects by other public agencies in response to the proposed amendments could substantially increase hazards due to a design feature of incompatible uses.*

- ♦ *Develop and implement a program that will include procedures for routine inspections and emergency facility operation to allow safe navigation should the facility become damaged or malfunction. The program will include the following specific components:*
 - *Routine inspections and correction procedures to ensure that facility safety features are in good working order.*
 - *Routine inspections and correction procedures for navigational hazards around facilities, including floating or submerged debris and the formation of shoals.*
 - *Contingency and emergency operating procedures to address the possibility that a boat colliding with the flow control facilities will damage the facilities or otherwise render them unable to operate as engineered, and provisions to allow safe navigation.*

III. Impact 5.16-3. Implementation of projects by other public agencies in response to the proposed amendments could result in inadequate emergency access.

The PEIR finds that the Delta Plan Amendments could create significant adverse impacts related to inadequate emergency access in both the Primary and Extended Planning Areas. Impacts could include the need to temporarily close or relocate emergency routes or close or reroute lanes, thereby reducing emergency access and possibly increasing emergency response times. Traffic or congestion also could delay response time for emergency vehicles. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 19-3, set forth above in the discussion of Impact 5.10-4 and previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 19-3 would minimize impacts to emergency access due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 19-3 or equally effective

mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

JJJ. Impact 5.16-4. Implementation of projects by other public agencies in response to the proposed amendments could conflict with adopted policies, plans, or programs supporting alternative transportation.

The PEIR finds that the Delta Plan Amendments could result in significant temporary or permanent adverse impacts to public transit, bicycle, or pedestrian facilities in both the Primary and Extended Planning Areas, resulting in conflicts with adopted policies, plans, or programs supporting alternative transportation. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 19-4, set forth below, which was previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 19-4 would minimize impacts on bicycle and pedestrian circulation due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 19-4 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 19-4: *Implementation of projects by other public agencies in response to the proposed amendments could conflict with adopted policies, plans, or programs supporting alternative transportation.*

- ♦ *Implement Mitigation Measure 19-1, above. The portion of the measure that addresses minimizing impacts on bicycle and pedestrian circulation also would apply to Impact 19-4a through e.*

KKK. Impact 5.17-1. Implementation of projects by other public agencies in response to the proposed amendments could cause substantial impacts through the disturbance or destruction of Tribal Cultural Resources.

The PEIR finds that the Delta Plan Amendments could cause significant permanent adverse impacts to tribal cultural resources through their damage or destruction in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and

of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measures 10-1 and 10-2, set forth above in the discussion of Impacts 5.7-2 and 5.7-3 and previously adopted and incorporated into the Delta Plan, would apply to covered actions and are recommended to be implemented by other public agencies for non-covered actions. Mitigation Measures 10-1 and 10-2 would minimize impacts to tribal cultural resources due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measures would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 10-1 and 10-2, or equally effective mitigation measures, is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

LLL. Impact 5.18-3. Projects implemented by other public agencies in response to the proposed amendments could be served by a landfill with insufficient permitted capacity to accommodate the projects' solid waste disposal needs and comply with federal, state, and local statutes and regulations related to solid waste.

The PEIR finds that the Delta Plan Amendments could create a significant adverse impact in both the Primary and Extended Planning Areas related to the temporary or permanent generation of solid waste. These impacts are potentially significant because the amount of solid waste generated by projects implemented by other agencies in response to the Delta Plan Amendments cannot be determined at this time; therefore, the effect on landfills cannot be determined. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 20-1, set forth below, which was previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-covered actions. Mitigation Measure 20-1 would minimize impacts associated with adverse effects on local landfills due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 20-1 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

2013 PEIR Mitigation Measure 20-1: *Projects implemented by other public agencies in response to the proposed amendments could be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs and comply with federal, state, and local statutes and regulations related to solid waste.*

- ◆ *Establish construction debris disposal fee schedules to promote recycling and minimize solid waste.*
- ◆ *Limit disposal of construction debris and other solid waste at local landfills if the landfills have limited capacity.*
- ◆ *Dispose of all construction debris at landfills and disposal facilities that are licensed for the type of wastes to be disposed. If the landfills and disposal facilities are not located near future construction sites, include analysis of transportation of solid waste in future environmental documentation for specific projects.*
- ◆ *Require construction contractors to prepare construction debris management plans and require reuse or recycling of construction debris.*
- ◆ *Develop project-specific solid waste plans to maximize practices that reduce and recycle solid waste and sludge generated by water, wastewater, and stormwater treatment facilities; and collect, recycle, or compost litter and solid waste generated at new facilities designed for visitor use (such as parks and visitor centers).*

MMM. Impact 5.18-4. Implementation of projects by other public agencies in response to the proposed amendments could result in substantial adverse physical impacts associated with construction of new or modified fire protection, police protection, school, and other public facilities.

The PEIR finds that the Delta Plan Amendments could result in significant adverse impacts associated with the construction of new or modified fire protection, police protection, school, and other public facilities in both the Primary and Extended Planning Areas. Impacts could include new demand for police and fire protection services generated by new facilities and temporarily increased response times for fire protection, law enforcement, and emergency medical services due to increased construction traffic. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new or improved storage and conveyance facilities and the operation of both and of existing facilities, and actions taken to implement the performance measures. Although construction and operation activities associated with projects implemented by other public agencies in response to the proposed amendments could result in negligible levels of temporary and permanent population growth, a minor increase in population would not add substantial new demands to public services or require new or altered public services facilities. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

Implementation of 2013 PEIR Mitigation Measure 17-1, set forth above in the discussion of Impact 5.10-4 and previously adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be implemented by other public agencies for non-

covered actions. Mitigation Measure 17-1 would minimize the potential for projects to substantially impact public services due to actions taken by other public agencies in response to the Delta Plan Amendments. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts to a less-than-significant level in all cases. Further, implementation and enforcement of Mitigation Measure 17-1 or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this impact would remain significant and unavoidable.

VI. LESS THAN SIGNIFICANT IMPACTS

The PEIR identifies the following as less than significant impacts or as having no impact. Mitigation to further reduce less than significant impacts is not required by CEQA. The findings in this Section are based on the PEIR, the discussion and analysis in which is hereby incorporated in full by this reference.

A. Impact 5.4-3. Emissions associated with construction of projects by other public agencies in response to the proposed amendments would have a less-than-significant impact related to the creation of objectionable odors affecting a substantial number of people.

The PEIR finds that the Delta Plan Amendments could result in the temporary generation of construction-related odorous-emissions in the Primary and Extended Planning Areas. These impacts could be caused by construction activities associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities, and actions taken to implement the performance measures. However, given the temporary and intermittent nature of the impacts and the rapid dissipation of odor over short distances in both the Primary and Extended Planning Areas, and given the low number of sensitive receptors in the Primary Planning Area, objectionable odor is unlikely to affect a substantial number of people. Additionally, activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

This impact would be less than significant; therefore, no mitigation is required.

Mitigation Measure: *No mitigation required.*

B. Impact 5.4-7. Emissions associated with operation of projects by other public agencies in response to the proposed amendments would have a less-than-significant impact related to exposing sensitive receptors to substantial pollutant concentrations.

The PEIR finds that the Delta Plan Amendments could generate air pollutant emissions such as fugitive dust, CO, and TACs that at high dosages could present unacceptable health risks to sensitive receptors in both the Primary and Extended Planning Areas. These impacts could be caused by constructed facilities and their operation associated with projects implemented by

other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and existing facilities, and actions taken to implement the performance measures. However, operational activities would not have sufficient intensity or duration to give rise to the level of chronic exposure necessary to cause health impacts in either the Primary or Extended Planning Areas. Activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

This impact would be less than significant; therefore, no mitigation is required.

Mitigation Measure: *No mitigation required.*

C. Impact 5.8-1. Implementation of projects by other public agencies in response to the proposed amendments would have a less-than-significant impact related to substantial inefficient, wasteful, or unnecessary consumption of energy or changes to hydropower generation.

The PEIR finds that the Delta Plan Amendments would require the direct and indirect use of energy resources. However, construction activities or constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments are not expected to cause inefficient, wasteful, or unnecessary energy use, nor are they expected to lead to a substantial reduction in hydropower generation, in either the Primary or Extended Planning Areas. Additionally, activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

This impact would be less than significant; therefore, no mitigation is required.

Mitigation Measure: *No mitigation required.*

D. Impact 5.8-2. Implementation of projects by other public agencies in response to the proposed amendments would have a less-than-significant impact related to increased energy consumption due to growth inducement that conflicts with applicable plans, policies, or regulations of local counties and/or State energy standards that have been adopted for the purpose of improving energy efficiency or reducing consumption of fossil fuels.

The PEIR finds that the Delta Plan Amendments would not cause significant adverse impacts related to increased energy use associated with growth inducement that conflicts with applicable plans, policies, regulations, or standards in either the Primary or Extended Planning Areas. Though indirect growth induced by projects implemented by other public agencies in response to the DLIS, CSO, and PM Amendments may cause increased energy use, it is anticipated that construction and operation activities will conform to applicable plans, policies, regulations, and standards. Additionally, activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

This impact would be less than significant; therefore, no mitigation is required.

Mitigation Measure: *No mitigation required.*

- E. Impact 5.8-3. Implementation of projects by other public agencies in response to the proposed amendments would have a less-than-significant impact related to conflicts with applicable plans, policies, or regulations of local counties and/or State energy standards that have been adopted for the purpose of improving energy efficiency or reducing consumption of fossil fuels.**

The PEIR finds that the Delta Plan Amendments would not cause significant adverse impacts in either the Primary or Extended Planning Areas related to conflicts with applicable plans, policies, or regulations of local counties and/or state energy standards adopted for the purpose of improving energy efficiency or reducing consumption of fossil fuels. It is anticipated that construction and operation activities undertaken by other public agencies in response to the proposed amendments will conform to applicable plans, policies, or regulations of local counties and/or state energy standards. Additionally, activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

This impact would be less than significant; therefore, no mitigation is required. .

Mitigation Measure: *No mitigation required.*

- F. Impact 5.14-1. Implementation of projects by other public agencies would have a less-than-significant impact related to requiring construction and operation crew relocation resulting in population growth and demand for housing.**

The PEIR finds that the Delta Plan Amendments could cause negligible levels of temporary and long-term population growth in the Primary and Extended Planning Areas. These impacts could be caused by constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and existing facilities, and actions taken to implement the performance measures. However, relocation for construction activities is usually temporary, the operation and maintenance of constructed facilities is likely to be performed largely by the existing workforce, and existing housing units would be sufficient to accommodate any workers who relocate to the area. Additionally, activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

This impact would be less than significant; therefore, no mitigation is required.

Mitigation Measure: *No mitigation required.*

G. Impact 5.14-2. Implementation of projects by other public agencies would have a less-than-significant impact related to displacing substantial numbers of housing or people and necessitating the construction of replacement housing elsewhere.

The PEIR finds that the Delta Plan Amendments could result in displacement of some housing and people in the Primary and Extended Planning Areas. These impacts could be caused by constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and existing facilities, and actions taken to implement the performance measures. However, these impacts are expected to be negligible because it is likely that projects would be sited in unpopulated or sparsely populated areas, limiting the potential for displacement of housing, and existing housing units would be sufficient to accommodate any displaced people. Additionally, activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

This impact would be less than significant; therefore, no mitigation is required. Nonetheless, implementation of 2013 PEIR Mitigation Measure 16-1, set forth below, which was previously adopted and incorporated into the Delta Plan, would further reduce these less than significant impacts.

PEIR Mitigation Measure 16-1: *Implementation of projects by other public agencies may displace substantial numbers of housing or people, necessitating the construction of replacement housing elsewhere.*

- ♦ *Require compliance with applicable local policies and regulations regarding the provision of affordable housing.*
- ♦ *Construct replacement housing if existing housing will be displaced.*

H. Impact 5.18-1. Implementation of projects by other agencies in response to the proposed amendments would have a less-than-significant impact related to exceeding wastewater treatment requirements or capacity to serve demand, requiring the construction of new wastewater treatment facilities or expansion of existing facilities.

The PEIR finds that the Delta Plan Amendments could cause negligible increased demands on wastewater systems in the Primary and Extended Planning Areas. These impacts could be caused by constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and existing facilities, and actions taken to implement the performance measures. However, given the existing population in the Primary and Extended Planning Areas, the temporary nature of worker

relocation during construction activities, and the minimal additional staff likely needed for operations, activities by other public agencies in response to the Delta Plan Amendments would not add substantial new customer demands to existing wastewater systems. Additionally, any new wastewater discharge would comply with water treatment requirements of the applicable Regional Water Board. Finally, activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

This impact would be less than significant; therefore, no mitigation is required.

Mitigation Measure: *No mitigation required.*

I. Impact 5.18-2. Implementation of projects by other public agencies in response to the proposed amendments would have a less-than-significant impact related to requiring or causing the construction of new water treatment or distribution facilities or expansion of existing facilities.

The PEIR finds that the Delta Plan Amendments could result in negligible increased demand for new water treatment or distribution facilities in the Primary and Extended Planning Areas. These impacts could be caused by constructed facilities and their operation associated with projects implemented by other public agencies in response to the proposed amendments, including new flood management infrastructure, new or improved storage and conveyance facilities and the operation of both and existing facilities, and actions taken to implement the performance measures. However, given the existing population in the Primary and Extended Planning Areas, the temporary nature of worker relocation during construction activities, and the minimal additional staff likely needed for operations, activities by other public agencies in response to the Delta Plan Amendments would not add substantial new customer demands to existing water systems. Projects constructed in response to the proposed CSO and PM Amendments could include new water treatment facilities or an expansion of existing facilities; however, the physical effects from these construction activities are analyzed as part of other resource-related impacts, and any recommended mitigation measures needed to minimize impacts to environmental resources to less than significant are identified in those sections. Additionally, activities by other public agencies in response to the proposed DLIS Amendment would only occur in the Primary Planning Area; therefore, no impact would occur in the Extended Planning Area.

This impact would be less than significant; therefore, no mitigation is required.

Mitigation Measure: *No mitigation required.*

VII. CUMULATIVE IMPACTS

An EIR is required to discuss the cumulative impacts of a project when the project's incremental effect is cumulatively considerable. State CEQA Guidelines §15130(a)(1). "Cumulatively considerable" means that the incremental effects of the project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects. State CEQA Guidelines § 15065(a)(3); Pub. Resources Code § 21083(b)(2). Chapter 7 of the

PEIR analyzes the cumulative impacts of the Delta Plan Amendments in combination with reasonably foreseeable probable future projects, which are listed in Table 7-2 of the PEIR as revised by Chapter 2 of the Final PEIR. The Mitigation Measures discussed in this Section are all adopted and incorporated into the Project above and set forth in the discussion of Significant and Unavoidable Impacts in Section V. As explained in Section XI, below, the findings in this Section are based on the PEIR, the discussion and analysis in which is hereby incorporated in full by this reference.

A. Aesthetics

Construction and operation of projects listed in Table 7-2 (e.g., desalination plants, fish screens, flood control projects, dredging operations, habitat restoration or improvement projects, water conveyance pipelines, reservoir enlargement, conjunctive use projects, and ancillary buildings or structures) would introduce new physical features into the existing landscape, which could result in significant temporary, long-term, or permanent adverse effects on visual quality, affect scenic vistas and scenic resources, and introduce new sources of light and glare. The effect on aesthetic and scenic resources that would result from these changes associated with past, present, and planned future projects could be significant.

Projects implemented by other public agencies in response to the Project would introduce new physical features into the existing landscape, which could result in significant adverse effects on visual quality in the Primary and Extended Planning Areas that are either temporary (e.g., construction-related temporary activities such as earthmoving activities and the staging of construction equipment could alter the existing landscape of agricultural and natural open space areas) or permanent (e.g., permanent structures may not be of the same visual character of surrounding landscapes). Therefore, projects implemented by other public agencies in response to the proposed amendments could result in a cumulatively considerable incremental contribution to a significant cumulative impact related to the substantial degradation of scenic vistas, scenic resources, and existing visual character.

2013 PEIR Mitigation Measures 8-1, 8-2, and 8-3, previously adopted and incorporated into the Delta Plan, could minimize impacts to aesthetic and scenic resources. Mitigation Measure 5.2-1, adopted and incorporated into the Project above, could also reduce the contribution of covered actions to cumulative impacts associated with glare caused by new transmission lines to less than cumulatively considerable. However, because the extent and location of impact-causing actions are not known, it is not possible to conclude that the mitigation measures would reduce the contribution of covered and non-covered actions to less than cumulatively considerable in all cases. Further, implementation and enforcement of these mitigation measures or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this cumulative impact could remain significant and unavoidable.

B. Agriculture and Forestry Resources

Construction and operation of projects listed in Table 7-2 could convert Farmland to nonagricultural use or forestland to nonforest use, conflict with a Williamson Act Contract, or create a conflict with zoning for agricultural, forestland, or timberland use. Construction activities could include developing temporary facilities such as access haul roads, borrow sites,

and areas for staging, equipment storage, and temporary work sites, which could also convert Farmland to nonagricultural use or forestland to nonforest use, conflict with a Williamson Act Contract, or create a conflict with zoning for agricultural, forestland, or timberland use. These temporary construction-related impacts could become long-term or permanent if topsoil is not replaced to pre-construction conditions and the affected area is not replanted to the extent feasible. The effect on agriculture and forestry resources that would result from these changes associated with past, present, and planned future projects would be a cumulatively significant impact.

Projects implemented by other public agencies in response to the Project could result in significant temporary (e.g., construction of haul roads or equipment staging sites) or permanent (facility footprint) conversion of Farmland; conflicts with Williamson Act contracts and agricultural zoning; conversion of forestland, timberland, and timber production zones to nonforest or nontimber uses; and conversion of Farmland to nonagricultural use in the Primary and Extended Planning Areas. Therefore, projects implemented by other public agencies in response to the proposed amendments could result in a cumulatively considerable incremental contribution to a significant cumulative impact on agriculture and forestry resources.

2013 PEIR Mitigation Measures 4-1, 4-2, 4-3, 4-4, 7-1, 7-2, 7-3, 7-4, and 9-1, previously adopted and incorporated into the Delta Plan, could minimize impacts to agriculture and forestry resources. However, because the extent and location of impact-causing actions are not known, it is not possible to conclude that the mitigation measures would reduce the contribution of covered and non-covered actions to less than cumulatively considerable in all cases. Further, implementation and enforcement of these mitigation measures or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this cumulative impact could remain significant and unavoidable.

C. Air Quality and Greenhouse Gas Emissions

Construction and operation of projects listed in Table 7-2 would likely require the use of diesel-powered equipment and vehicles, and emissions would result from combustion of fuels in equipment and vehicles. Therefore, projects could conflict with an applicable air quality plan, violate an air quality standard, contribute substantially to an air quality violation, and result in a short-term or long-term cumulatively considerable net increase of nonattainment pollutants. Projects could also create objectionable odors affecting a substantial number of people, expose sensitive receptors to substantial pollutant concentrations, and result in an increase in GHG emissions. These significant effects could be temporary during construction as well as permanent during operation of projects. The effect on air quality and GHG emissions that would result from changes associated with past, present, and planned future projects would be a cumulatively significant impact.

Projects implemented by other public agencies in response to the Project could result in temporary or long-term emissions of air pollutants, substantially contributing to pollutant concentrations that exceed the National Ambient Air Quality Standards and California Ambient Air Quality Standards, and conflicting with a local Air Quality Management Plan, thereby resulting in conflicts with applicable air quality plans. Implementation of projects could result in the temporary generation of odorous emissions during construction, though the proposed project

would not result in significant effects that would result in a cumulatively considerable incremental contribution to a significant cumulative impact because odors would be temporary and intermittent and would dissipate rapidly over a short distance. Construction of projects could generate air pollutant emissions that, at high dosages, could present health risks to sensitive receptors and result in significant temporary adverse effects on air quality. Implementation of projects could result in temporary and long-term GHG emissions and conflict with GHG reduction policies, plans, and regulations. Therefore, projects implemented by other public agencies in response to the proposed amendments could result in a cumulatively considerable incremental contribution to a significant cumulative impact related to the substantial degradation of air quality and GHG emissions production.

2013 PEIR Mitigation Measures 9-1, 9-2, 9-3, and 21-1, previously adopted and incorporated into the Delta Plan, could minimize impacts to air quality and impacts due to GHG emissions. However, because the extent and location of impact-causing actions are not known, it is not possible to conclude that the mitigation measures would reduce the contribution of covered and non-covered actions to less than cumulatively considerable in all cases. Further, implementation and enforcement of these mitigation measures or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this cumulative impact could remain significant and unavoidable.

D. Biological Resources – Aquatic

Construction and operation of projects listed in Table 7-2 could adversely impact habitat associated with special-status fish species, result in adverse direct effects on special-status fish species, and interfere with the movement of native resident fish species. These significant adverse effects could be temporary as well as permanent. For example, construction activities could indirectly affect special-status fish species in multiple ways, including disturbance of prey species, mobilization of sediment, disturbance of riparian habitat, or chemical contamination. Operation of conveyance projects could result in direct impacts to special-status fish species. The effect on aquatic biological resources that would result from changes associated with past, present, and planned future projects would be a cumulatively significant impact.

Projects constructed and operated by other public agencies in response to the Project could include, for example, new and/or rehabilitated existing setback levees, floodway widening, bypass expansions, new or expanded water storage and conveyance facilities, and new or expanded water treatments plants. These projects could result in significant temporary and permanent adverse impacts to special-status fish species and their habitat in the Primary and Extended Planning Areas, including through, for example, construction-related disturbance of species and habitat and operation-related alteration of flows and migratory patterns. Therefore, projects implemented by other public agencies in response to the proposed amendments could result in a cumulatively considerable incremental contribution to a significant cumulative impact related to the substantial degradation or elimination of special-status fish species and their habitat and the movement of native resident fish species.

2013 PEIR Mitigation Measures 4-1, 4-2, 4-3, 4-4, and 4-5, previously adopted and incorporated into the Delta Plan, could minimize impacts to aquatic biological resources. However, because the extent and location of impact-causing actions are not known, it is not possible to conclude

that the mitigation measures would reduce the contribution of covered and non-covered actions to less than cumulatively considerable in all cases. Further, implementation and enforcement of these mitigation measures or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this cumulative impact could remain significant and unavoidable.

E. Biological Resources – Terrestrial

Construction and operation of projects listed in Table 7-2 could result in adverse effects on sensitive natural communities, including wetlands and riparian habitat, special-status plant species, and special-status terrestrial wildlife species and their habitat. Construction activities could harm or kill special-status terrestrial wildlife species inhabiting areas near or adjacent to levee construction sites. Construction and operation of projects could also interfere with the movement of native resident or migratory wildlife species. These activities could also have the potential to conflict with local policies or ordinances protecting biological resources or the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat protection plan. The effect on terrestrial biological resources that would result from changes associated with past, present, and planned future projects would be a cumulatively significant impact.

Projects constructed and operated by other public agencies in response to the Project could result in significant temporary or permanent adverse effects on sensitive natural communities, special-status plant species, and special-status wildlife species and their habitat. For example, construction activities could result in temporary habitat disturbance and permanent habitat loss from clearing vegetation, temporarily dewatering sections of channels, and general grading, re-contouring, and filling portions of channels and/or wetlands to accommodate implementation of projects. Construction activities could also result in temporary or permanent changes to wildlife movement corridors for terrestrial wildlife. Additionally, projects have the potential to conflict with local policies and ordinances for terrestrial biological resources. Therefore, projects implemented by other public agencies in response to the proposed amendments could result in a cumulatively considerable incremental contribution to a significant cumulative impact related to the substantial adverse effects on terrestrial biological resources.

2013 PEIR Mitigation Measures 4-1, 4-2, 4-3, 4-4, and 4-5, previously adopted and incorporated into the Delta Plan, could minimize impacts to terrestrial biological resources. However, because the extent and location of impact-causing actions are not known, it is not possible to conclude that the mitigation measures would reduce the contribution of covered and non-covered actions to less than cumulatively considerable in all cases. Further, implementation and enforcement of these mitigation measures or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this cumulative impact could remain significant and unavoidable.

F. Cultural and Paleontological Resources

Construction and operation of projects listed in Table 7-2 could result in a substantial adverse change to significant historic buildings, structures, or linear features and could disturb or destroy prehistoric and historic-era archaeological resources, buried human remains, or paleontological

resources, which could result in significant permanent adverse effects on cultural and paleontological resources. Impacts to historic resources would primarily occur as a result of construction activities, as a result of introducing new elements to a historic setting or altering a significant built resource. The effect on cultural and paleontological resources that would result from changes associated with past, present, and planned future projects would be a cumulatively significant impact.

Projects implemented by other public agencies in response to the Project could result in significant permanent impacts to historic built resources, as well as to archaeological resources, human remains, and paleontological resources through their damage or destruction. Impacts to historic resources would primarily occur as a result of construction activities. Therefore, projects implemented by other public agencies in response to the proposed amendments could result in a cumulatively considerable incremental contribution to a significant cumulative impact related to the substantial degradation or destruction of cultural and paleontological resources.

2013 PEIR Mitigation Measures 10-1, 10-2, 10-3, and 12-1, previously adopted and incorporated into the Delta Plan, could minimize impacts to cultural and paleontological resources. However, because the extent and location of impact-causing actions are not known, it is not possible to conclude that the mitigation measures would reduce the contribution of covered and non-covered actions to less than cumulatively considerable in all cases. Further, implementation and enforcement of these mitigation measures, or equally effective mitigation measures, is within the responsibility and jurisdiction of other public agencies; therefore, this cumulative impact could remain significant and unavoidable.

G. Energy Resources

Construction and operation of projects listed in Table 7-2 could result in changes in energy resources, including substantial inefficient, wasteful, or unnecessary long-term consumption of energy, changes to hydropower generation, or increased energy consumption due to growth inducement. Additionally, implementation of projects in Table 7-2 could conflict with applicable plans, policies, or regulations of local, county, and/or state energy standards that have been adopted for the purpose of improving energy efficiency or reducing consumption of fossil fuels. Given the multiple laws, regulations, and programs within the state that require or promote the efficient use of energy, a cumulative adverse effect is not expected to occur in either the Primary Planning Area or the Extended Planning Area related to substantially inefficient, wasteful, or unnecessary long-term consumption of energy, a substantial reduction in the generation of renewable energy, or increased energy consumption due to growth inducement.

Projects implemented by other public agencies in response to the Project are not likely to result in significant adverse impacts related to inefficient, wasteful, or unnecessary long-term consumption of energy, changes to hydropower generation, or increased energy consumption due to growth inducement. Additionally, projects are not likely to result in significant adverse impacts related to conflicts with applicable plans, policies, or regulations of local county and/or state energy standards that have been adopted for the purpose of improving energy efficiency or reducing consumption of fossil fuels. Multiple laws, regulations, and programs within the state require or promote the efficient use of energy. Therefore, projects implemented by other public agencies in response to the proposed amendments would not result in a cumulatively

considerable incremental contribution to a cumulative impact related to energy, and there is no cumulative impact.

H. Geology, Soils, Seismicity, and Mineral Resources

Construction and operation of projects listed in Table 7-2 could result in significant adverse effects associated with the rupture of known earthquake faults, strong seismic groundshaking, and substantial soil erosion or loss of topsoil, and could expose people or structures to hazards associated with unstable soil conditions. Construction projects on or adjacent to a known fault could be exposed to risks associated with fault rupture or seismic groundshaking. Construction of projects could also result in the loss of a known mineral resources or an important mineral resource recovery site, depending on the projects' locations. The effect on geology, soils, seismicity, and mineral resources that would result from changes associated with past, present, and planned future projects could be a cumulatively significant impact.

Projects implemented by other public agencies in response to the Project could expose people or structures to risk of loss, injury, or death due to rupture of known earthquake faults, and could result in significant adverse effects associated with strong seismic groundshaking. Projects could result in significant adverse effects associated with unstable soil conditions, including landslides, expansive soils, subsidence, high organic matter soils, and nuisance water, and could result in significant adverse effects associated with soil erosion and loss of topsoil. Implementation of projects could also result in the loss of a known mineral resources or an important mineral resource recovery site in the Primary Planning Area and Extended Planning Area, both through potential placement of facilities in area with known mineral resources and through demand for aggregate resources from project construction, depending on the projects' locations and proximity to resources. Therefore, projects implemented by other public agencies in response to the proposed amendments could result in a cumulatively considerable incremental contribution to a significant cumulative impact related to geology, soils, seismicity, and mineral resources.

2013 PEIR Mitigation Measures 11-1, 11-2, 11-3, 11-4, 11-5, 11-6, 11-7, 11-8, 11-9, 13-1, and 13-2, previously adopted and incorporated into the Delta Plan, could minimize impacts to geology, soils, seismicity, and mineral resources. However, because the extent and location of impact-causing actions are not known, it is not possible to conclude that the mitigation measures would reduce the contribution of covered and non-covered actions to less than cumulatively considerable in all cases. Further, implementation and enforcement of these mitigation measures or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this cumulative impact could remain significant and unavoidable.

I. Hazards and Hazardous Materials

Construction activities, constructed facilities, and operations associated with other projects listed in Table 7-2 could involve the routine transport, use, or disposal of hazardous materials, which if accidentally released could create a hazard to the public or the environment or be located within one-quarter mile of a school, and could result in significant adverse effects involving the exposure of construction workers, the public, and the environment to existing soil and/or groundwater contamination. Implementation of projects could result in airport safety hazards by placing projects in proximity to the hazards associated with airport operations or result in the

potential for collisions between aircraft and wildlife. Project construction and heavy equipment use could result in interference with existing transportation and circulation patterns. Operation of new projects could result in interference with an adopted emergency response plan or emergency evacuation plan by making permanent changes to emergency access routes and evacuation routes as a result of project operation, depending on where projects are located. Construction and operation of new projects could result in new areas of standing water that could result in vector-related public health hazards through the creation of mosquito habitat. The effect on hazards and hazardous materials that would result from changes associated with past, present, and planned future projects would be cumulatively significant impact.

Projects implemented by other public agencies in response to the Delta Plan Amendments similarly could create a hazard to the public or the environment from the release of hazardous materials during their use, storage, or transport; could be located within one-quarter mile of an existing or proposed school; and could expose individuals to the potential of accidental hazardous material spills. Projects could also: result in significant adverse effects involving the exposure of construction workers, the public, and the environment to existing soil and/or groundwater contamination through construction activities involving ground disturbing activities; result in airport safety hazards by placing projects in proximity to the hazards associated with airport operations and/or by increasing the potential for collisions between aircraft and wildlife; interfere with emergency response access; and increase the risk of wildfires by locating projects in areas that have an increased risk of wildfires or including equipment and vehicle use that could potentially ignite dry vegetation and result in fire. Therefore, projects implemented by other public agencies in response to the proposed amendments could result in a cumulatively considerable incremental contribution to a significant cumulative impact related to hazards and hazardous materials.

2013 PEIR Mitigation Measures 14-1, 14-2, 14-3, 14-4, 14-5, 17-1, and 19-3, previously adopted and incorporated into the Delta Plan, could minimize impacts to hazards and hazardous materials. However, because the extent and location of impact-causing actions are not known, it is not possible to conclude that the mitigation measures would reduce the contribution of covered and non-covered actions to less than cumulatively considerable in all cases. Further, implementation and enforcement of these mitigation measures or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this cumulative impact could remain significant and unavoidable.

J. Hydrology and Water Quality

Construction and operation of projects listed in Table 7-2 could result in changes to hydrology and water quality, including changes to surface water and/or groundwater supply and quality, drainage patterns and impervious surface cover, and flooding and inundation. Construction and operation of projects could also: result in changes to surface water and/or groundwater quality; affect groundwater supply through construction-related activities; temporarily change availability of water supplies by temporarily affecting water quality to the extent of making supplies unusable; or increase the imperviousness of soils, decreasing infiltration rates and increasing surface run-off that could exceed the capacity of existing or planned stormwater drainage systems and/or result in localized flooding. Construction and operation of projects could also expose people or structures to a significant risk of loss, injury, or death involving flooding, or a

risk of inundation by seiche and mudflow. Finally, climate change could conflict with operation of projects listed in Table 7-2. These significant effects could be temporary (e.g., caused by construction dewatering activities) as well as permanent (e.g., caused by new or expanded storage or conveyance activities). The effect on water resources that would result from changes associated with past, present, and planned future projects would be a cumulatively significant impact.

Projects implemented by other public agencies in response to the Project similarly could: result in the release of pollutants into surface and/or groundwater that could substantially degrade water quality due to project construction and operations; deplete groundwater supplies or interfere substantially with groundwater recharge; change water supply availability to Delta Water users or require new or expanded entitlements; substantially increase the rate or amount of surface runoff in a manner that would exceed the capacity of existing or planned stormwater drainage systems and/or result in flooding; increase or expose people or structures to a significant risk of loss, injury, or death involving flooding; and cause inundation by seiche. Additionally, climate change, including sea-level rise, could conflict with the operation of projects by other public agencies in response to the proposed amendments. Therefore, projects implemented by other public agencies in response to the proposed amendments could result in a cumulatively considerable incremental contribution to a significant cumulative impact related to hydrology and water quality.

2013 PEIR Mitigation Measures 3-1, 3-2, 5-1, 5-2, 5-4, 5-5, 21-2, and 21-4, previously adopted and incorporated into the Delta Plan, could minimize impacts related to hydrology and water quality. However, because the extent and location of impact-causing actions are not known, it is not possible to conclude that the mitigation measures would reduce the contribution of covered and non-covered actions to less than cumulatively considerable in all cases. Further, implementation and enforcement of these mitigation measures or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this cumulative impact could remain significant and unavoidable.

K. Land Use and Planning

Construction and operation of projects listed in Table 7-2 could conflict with land use plans, policies, or regulations or physically divide an established community, which could result in significant temporary or permanent adverse effects on land use. The effect on land use and planning that would result from changes associated with past, present, and planned future projects would be a cumulatively significant impact.

Projects implemented by other public agencies in response to the Project could result in conflicts with land use plans, policies, and regulations meant to reduce environmental impacts or result in division of established communities. Therefore, projects implemented by other public agencies in response to the proposed amendments could result in a cumulatively considerable incremental contribution to a significant cumulative impact related to the substantial impact on land use and planning.

2013 PEIR Mitigation Measures 3-1, 4-1, 6-1, and 6-2, previously adopted and incorporated into the Delta Plan, could minimize impacts to land use and planning. However, because the extent

and location of impact-causing actions are not known, it is not possible to conclude that the mitigation measures would reduce the contribution of covered and non-covered actions to less than cumulatively considerable in all cases. Further, implementation and enforcement of these mitigation measures or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this cumulative impact could remain significant and unavoidable.

L. Noise

Construction and operation of projects listed in Table 7-2 could expose people to noise levels in excess of standards established in applicable plans and ordinances, cause a substantial increase in ambient noise levels, and expose sensitive receptors to excessive groundborne vibrations. These impacts could be temporary or long-term during construction and operation, as well as permanent during operation. The effect on noise that would result from changes associated with past, present, and planned future projects would be a cumulatively significant impact.

Projects implemented by other public agencies in response to the Project could expose people to elevated noise levels and could result in substantial temporary or permanent increases in ambient noise levels. Projects also could expose sensitive receptors to excessive groundborne vibrations. Therefore, projects implemented by other public agencies in response to the proposed amendments could result in a cumulatively considerable incremental contribution to a significant cumulative impact related to the substantial increase in noise levels and groundborne vibrations.

2013 PEIR Mitigation Measures 15-1, 15-2, and 15-3, previously adopted and incorporated into the Delta Plan, could minimize impacts to noise. However, because the extent and location of impact-causing actions are not known, it is not possible to conclude that the mitigation measures would reduce the contribution of covered and non-covered actions to less than cumulatively considerable in all cases. Further, implementation and enforcement of these mitigation measures or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this cumulative impact could remain significant and unavoidable.

M. Population, Employment, and Housing

Construction and operation of projects listed in Table 7-2 could require workers to move to the area to support construction activities and maintenance operations such as vegetation removal and rodent damage repair along new levees or operations of large water conveyance facilities, which may result in significant population growth and demand for housing. Projects also may displace substantial numbers of housing or people, depending on where projects are located, necessitating the construction of replacement housing elsewhere. The effect on population, employment, and housing that would result from changes associated with past, present, and planned future projects would be a cumulatively significant impact.

Projects implemented by other public agencies in response to the Project would result in negligible levels of temporary and permanent population growth and would not result in significant population growth or demand for housing; existing vacant units could absorb any population increase. Projects could result in displacement of some housing and people depending on the location of facilities and activities. However, impacts would be negligible because

projects would likely be sited in unpopulated or sparsely populated areas. Therefore, projects implemented by other public agencies in response to the proposed amendments would not result in a cumulatively considerable incremental contribution to a significant cumulative impact related to population, employment, and housing and this cumulative impact would be less than significant.

N. Recreation

Construction and operation of projects listed in Table 7-2 could significantly alter, impair, degrade, or eliminate recreational resources, facilities, and opportunities, and may include the construction or expansion of recreational facilities that could result in significant environmental impacts. Construction and operation of the projects also could increase the use of existing recreational resources and facilities such that substantial physical deterioration would occur or be accelerated. The effect on recreational resources that would result from changes associated with past, present, and planned future projects would be a cumulatively significant impact.

Projects implemented by other public agencies in response to the Project could result in temporary or long-term impairment, degradation, and elimination of recreational resources, facilities, and opportunities in the Primary and Extended Planning Areas because of the presence of work sites and other construction and operational activities. Implementation of projects could also result in construction and modification of recreational facilities that could result in environmental impacts. Projects implemented by other agencies in response to the Delta Plan Amendments could also result in temporary and permanent adverse effects on recreation and recreational resources that cause displacement of recreationists to other recreational facilities, thereby accelerating physical deterioration of the other recreation facilities. Therefore, projects implemented by other public agencies in response to the proposed amendments could result in a cumulatively considerable incremental contribution to a significant cumulative impact related to the substantial impairment, degradation, and elimination of recreational resources.

2013 PEIR Mitigation Measures 3-1, 4-1, 11-4, 18-1, 18-2, and 18-3, previously adopted and incorporated into the Delta Plan, could minimize impacts associated with recreational resources. However, because the extent and location of impact-causing actions are not known, it is not possible to conclude that the mitigation measures would reduce the contribution of covered and non-covered actions to less than cumulatively considerable in all cases. Further, implementation and enforcement of these mitigation measures or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this cumulative impact could remain significant and unavoidable.

O. Transportation, Traffic, and Circulation

Construction and operation of projects listed in Table 7-2 could conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system; substantially increase hazards due to a design feature or incompatible uses; result in inadequate emergency access; and conflict with adopted policies, plans, or programs supporting alternative transportation. The effect on transportation, traffic, and circulation that would result from changes associated with past, present, and planned future projects could be a cumulatively significant impact.

Projects implemented by other public agencies in response to the Project could result in significant temporary, long-term, or permanent adverse effects on transportation, traffic, and circulation by conflicting with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system through road closures or relocation, potentially by increasing traffic congestion from an increase in the numbers of trucks at intersections and on road segments, and possibly requiring temporary railroad track closures. Projects could impact navigation in waterways and deep water channels and cause a potential for increased hazards, or result in the need to close or relocate emergency routes or close or reroute lanes, thereby reducing emergency access and possibly increasing emergency response times. Projects could also result in significant temporary or permanent adverse effects on public transit, bicycle, or pedestrian facilities. Therefore, projects implemented by other public agencies in response to the proposed amendments could result in a cumulatively considerable incremental contribution to a significant cumulative impact related to transportation, traffic, and circulation.

2013 PEIR Mitigation Measures 19-1, 19-2, 19-3, and 19-4, previously adopted and incorporated into the Delta Plan, could minimize impacts to transportation, traffic, and circulation. However, because the extent and location of impact-causing actions are not known, it is not possible to conclude that the mitigation measures would reduce the contribution of covered and non-covered actions to less than cumulatively considerable in all cases. Further, implementation and enforcement of these mitigation measures or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this cumulative impact could remain significant and unavoidable.

P. Tribal Cultural Resources

Construction and operation of projects listed in Table 7-2 could result in the disturbance or destruction of surface and subsurface tribal cultural resources and limit tribal access to sacred locations or gathering sites. The effect on tribal cultural resources that would result from changes associated with past, present, and planned future projects could be a cumulatively significant impact.

Projects implemented by other public agencies in response to the Project could result in significant permanent adverse effects on tribal cultural resources through their damage or destruction due to the use of heavy equipment or inundation of land as part of water storage projects that may disturb surface or subsurface tribal cultural resources or limit access to sacred locations or gathering sites. Therefore, projects implemented by other public agencies in response to the proposed amendments could result in a cumulatively considerable incremental contribution to a significant cumulative impact related to the substantial degradation or destruction of tribal cultural resources.

2013 PEIR Mitigation Measures 10-1 and 10-2, previously adopted and incorporated into the Delta Plan, could minimize impacts to tribal cultural resources. However, because the extent and location of impact-causing actions are not known, it is not possible to conclude that the mitigation measures would reduce the contribution of covered and non-covered actions to less than cumulatively considerable in all cases. Further, implementation and enforcement of these mitigation measures or equally effective mitigation measures is within the responsibility and

jurisdiction of other public agencies; therefore, this cumulative impact could remain significant and unavoidable.

Q. Utilities and Public Service Systems

Construction and operation of projects listed in Table 7-2 could require substantial workers to construct and operate new infrastructure, which could result in temporary, long-term, or permanent increases in population and generate substantial new customer demand to existing wastewater and water treatment systems. Implementation of other projects could also generate solid waste that could overwhelm the permitted capacity of existing landfills. Such projects could also result in adverse physical impacts from construction of new or modified fire protection, police protection, school, and other public facilities. The effect on utilities and public service systems that would result from changes associated with past, present, and planned future projects would be a cumulatively significant impact.

Implementation of the projects by other public agencies in response to the proposed amendments would not add substantial new customer demands to existing wastewater and water systems that could result in a cumulatively considerable incremental contribution to a significant cumulative impact. Construction and operation of projects could result in temporary, long-term, or permanent generation of solid waste that could exceed the permitted capacity of local landfills or conflict with federal, state, and local statutes and regulations related to solid waste. Construction activities could result in temporarily increased response times for fire protection, law enforcement, and emergency medical services due to increased traffic from construction materials deliveries and travel to and from the job sites by construction workers; and construction and operation activities could add substantial new demands to public services or require new or altered public services facilities. Therefore, projects implemented by other public agencies in response to the proposed amendments could result in a cumulatively considerable incremental contribution to a significant cumulative impact related to the substantial impact on utilities and public services.

2013 PEIR Mitigation Measures 17-1 and 20-1, previously adopted and incorporated into the Delta Plan, could minimize impacts to utilities and public services. However, because the extent and location of impact-causing actions are not known, it is not possible to conclude that the mitigation measures would reduce the contribution of covered and non-covered actions to less than cumulatively considerable in all cases. Further, implementation and enforcement of these mitigation measures or equally effective mitigation measures is within the responsibility and jurisdiction of other public agencies; therefore, this cumulative impact could remain significant and unavoidable.

VIII. GROWTH INDUCING IMPACTS

An EIR is required to discuss growth inducing impacts, which consist of the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. State CEQA Guidelines § 15126.2(d); Pub. Resources Code § 21100(b)(5). Direct growth inducement would result, for example, if a project involves the construction of substantial new housing that would support increased population in a community or establishes substantial new permanent employment

opportunities. This additional population could, in turn, increase demands for public utilities, public services, roads, and other infrastructure. Indirect growth inducement would result if a project stimulates economic activity that requires physical development or removes an obstacle to growth and development (e.g., increasing infrastructure capacity that would enable new or additional development). It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment. State CEQA Guidelines §15126.2(d). Section 8.1 of the PEIR analyzes the growth inducing impacts of the Delta Plan Amendments. As explained in Section XI, below, the findings in this Section are based on the PEIR, the discussion and analysis in which is hereby incorporated in full by this reference.

A. Direct Growth Inducement

The DLIS and CSO Amendments would have no direct growth-inducement potential because no new housing would be developed or required as a result of them, nor would substantial new permanent employment opportunities be provided. Implementation of the PM Amendment may involve construction of new housing or commercial or industrial development; however, implementation of the PM Amendment would not directly induce substantial growth, because new employment opportunities for construction and operation of projects would likely be filled by the existing workforce in the Primary and Extended Planning Areas. Therefore, the Project would not induce substantial direct growth.

B. Indirect Growth

Although increased construction of projects undertaken by other public agencies in response to the Delta Plan Amendments would create jobs, an adequate labor pool exists in the Primary and Extended Planning Areas. It is expected that project construction workers would be drawn from the regional labor pool. Further, operation of projects would not result in a substantial increase in long-term jobs.

Increased flood protection in the Delta in response to the DLIS Amendment and new and improved infrastructure related to water conveyance and storage as a result of projects undertaken in response to the CSO and PM Amendments could remove potential obstacles to growth in both the Primary and Extended Planning Areas by removing land from designated flood hazard zones and increasing water supply reliability. Therefore, the Project would have an indirect growth-inducing effect.

Local development projects to accommodate any induced growth that might result from projects implemented in response to the Delta Plan Amendments would be subject to the land use regulations and general plans of the cities and counties in which they are located, as well as CEQA review. If any such growth-related decisions are covered actions, the agency proposing the actions will be required to implement all applicable and feasible mitigation measures identified in the PEIR and adopted herein, or equally effective mitigation, which would reduce or avoid the environmental impacts of induced growth.

IX. ALTERNATIVES

The PEIR analyzed four alternatives to the Delta Plan Amendments project, examining the

environmental impacts and feasibility of each alternative, as well as the ability of the alternatives to meet the project objectives. The alternatives analyzed are the No Project Alternative and three project alternatives, which are briefly summarized below and described in Section 9.3 of the Draft PEIR. All of the alternatives were considered within the context of the Delta Plan, which achieves the eight inherent background objectives described in the Delta Reform Act and contributes to achievement of the project objectives.

Pursuant to the Delta Reform Act, and as described in Section II of these Findings and in Section 3.1 of the Draft PEIR, the project objectives are to further achievement of the coequal goals and the eight inherent objectives in a manner that: (1) furthers the statewide policy to reduce reliance on the Delta in meeting the State's future water supply needs through regional self-reliance, (2) is consistent with specific statutory content requirements for the Delta Plan (Wat. Code sections 85302(c) through (e), and 85303-85308), (3) is implementable in a comprehensive, concurrent and interrelated fashion, and (4) is accomplished as rapidly as realistically possible without jeopardizing ultimate success. Additionally, each Amendment has specific objectives, which are described in detail in Sections 3.1.1 (DLIS), 3.1.2 (CSO), and 3.1.3 (PM) of the Draft PEIR.

Because furthering achievement of the coequal goals requires tradeoffs between different environmental impacts, the PEIR analyzes alternatives that combine policies to emphasize different aspects of the coequal goals. The PEIR does not consider alternatives that would not advance the coequal goals or attain most of the basic project objectives, would not be feasible, or would not reduce or eliminate at least one of the Project's environmental impacts. Such alternatives, which were reviewed but rejected for further consideration in the PEIR, are discussed in Section 9.2.3 of the Draft PEIR, as required by State CEQA Guidelines section 15126.6(c).

The Council certifies that it independently reviewed and considered the information on alternatives provided in the Final PEIR and the record of proceedings. The Council finds that no new alternatives that are considerably different from those analyzed in the Final PEIR have been identified and that the feasibility of the analyzed alternatives has not changed since Draft PEIR. Brief summaries of the evaluated alternatives are provided below. As explained in Section XI, below, the findings in this Section are based on the PEIR, the discussion and analysis in which is hereby incorporated in full by this reference, and on the record as a whole.

A. Alternative 1: Reduced Reliance on the Delta Emphasis

Alternative 1 focuses on reducing reliance on the Delta for water supply through a combination of actions that would increase water storage and conveyance outside the Delta and in the Delta export area. Alternative 1 differs from the Project in that it recommends less investment in conveyance facilities in the Delta and would not include new or expanded storage north of the Delta.

Construction and operation impacts associated with Alternative 1 would be less severe in the Primary Planning Area compared to the Project because no new or modified conveyance facilities would be promoted within the Delta. As a result of the comparatively less construction activity, there would be less of a change to visual character, introduction of fewer uses that could conflict with land use policies, and potentially less conversion of agricultural and forestland to

other uses. Similarly, there may be fewer short-term conflicts during construction with applicable air quality plans and fewer noise and groundborne vibration impacts. Reduced construction activity in the Primary Planning Area compared to the Project would also lead to a reduced likelihood of adverse impacts to special-status species and their habitat, sensitive natural communities, and wildlife migratory corridors, as well as fewer short-term geology and soils impacts. Reduced construction would also decrease impacts related to: pollution of surface and groundwater, reduced water supply, and increased surface runoff likely to overwhelm stormwater drainage systems and/or cause flooding. The reduced risk of construction-induced floods would also reduce the exposure of people or structures to a significant risk of loss, injury, or death from flooding, including flooding as a result of levee or dam failure, and would reduce the risk of inundation by seiche. Finally, reduced construction activities would reduce direct impacts to recreation, transportation, utilities, and public services in the Primary Planning Area compared to the Project.

In the areas of the Extended Planning Area south of the Delta, construction and operation impacts would be similar to or greater than the Project, because Alternative 1 would promote construction of new or modified conveyance facilities there. As a result of increased construction in the Extended Planning Area, compared to the Project, Alternative 1 could have more significant aesthetic; agriculture and forestry resource; air quality and GHG emissions; biological resource; geology, soils, seismicity, and mineral resource; land use and planning; noise; recreation; transportation, traffic, and circulation; and utilities and public service system impacts. Hydrology and water quality operational impacts potentially could be more severe in the Extended Planning Area under Alternative 1, since water supply and cold-water pool benefits of infrastructure improvements would be decreased without new or modified conveyance facilities and/or storage in the Delta.

With respect to the DLIS Amendment, Alternative 1 would recommend focusing State investments in areas at high risk of flooding and would assign lower priority than the Project to funding other State interests, including supporting the ecosystem and maintaining water supply corridors. Alternative 1 would achieve or partially achieve many of the DLIS Amendment objectives, but, unlike the Project, it would not meet the DLIS objective related to prioritizing investments in ecosystem enhancements that provide high benefits because of the Alternative's decreased emphasis on funding other State interests.

As to the CSO Amendment, Alternative 1 would promote construction of conveyance facilities outside of the Delta to reduce reliance on the Delta and would undertake fewer construction activities in the Delta than would the Project. Though Alternative 1 contains portions of the Project that would achieve or partially achieve many of the CSO Amendment objectives, because Alternative 1 does not promote new conveyance in or north of the Delta, it would not fully achieve any of the conveyance-related objectives. For example, Alternative 1 would be less likely than the Projected to achieve the CSO objectives related to (1) increasing the reliability of water available for export supplies; (2) enhancing the ability to divert and store water during wet periods that can be released during dry periods, and (3) helping to better manage water quality, especially during dry periods.

Alternative 1 would include revised performance measures reflecting more aggressive targets for

reducing Delta exports that would achieve the PM Amendment objectives. However, as a result of its decreased emphasis on conveyance facilities and storage within and north of the Delta, it may be more difficult under Alternative 1 to achieve performance measures related to stream flows in the Delta and its tributaries (e.g., create more natural functional flows). Achievement of flow-related targets may not be possible without negative impacts to water supply reliability, flood management, or other water management objectives.

Overall, Alternative 1 achieves or partially achieves most of the project objectives, although not to the same degree as the Project, and it would not meet the DLIS objective related to prioritizing investments in ecosystem enhancements that provide high benefits. Additionally, Alternative 1 could have more severe environmental effects than the Project in some resource areas.

For the foregoing reasons, Alternative 1 is hereby rejected.

B. Alternative 2: Delta Wetland Restoration Emphasis

Alternative 2 focuses on enhancement of Delta wetland habitat through a combination of actions that would prioritize levee improvements that provide ecosystem benefits and improve water infrastructure and operations within the Delta to support fisheries; increase water storage and conveyance in the Delta watershed to improve flow conditions in the Delta; and improve storage and conveyance in areas that rely on Delta water supplies to reduce reliance on the Delta.

Construction and operation impacts associated with Alternative 2 would be less severe than the Project in the Primary Planning Area because improvements to through-Delta conveyance and construction and operation of other new intake and conveyance facilities in the Delta would not be promoted. As a result, there would be less of a change in visual character, introduction of fewer uses that could conflict with land use policies, and potentially less conversion of agricultural and forestland to other uses. Similarly, due to decreased construction, Alternative 2 may have fewer short-term conflicts with applicable air quality plans, and fewer noise and groundborne vibration impacts. With reduced conveyance-related construction activity, there would be a reduced likelihood of adverse impacts to special status species and their habitat, sensitive natural communities, wildlife migratory corridors, and geology and soils. Reduced construction would also decrease impacts related to: pollution of surface and groundwater, reduced water supply, and increased surface runoff likely to overwhelm stormwater drainage systems and/or cause flooding. The reduced risk of construction-induced floods would also reduce the exposure of people or structures to a significant risk of loss, injury, or death from flooding, including flooding as a result of levee or dam failure, and would reduce the risk of inundation by seiche. Finally, reduced construction activities would reduce direct impacts to recreation, transportation, utilities, and public services in the Primary Planning Area compared to the Project.

There are no impacts identified as being more severe for Alternative 2 than for the Project.

With respect to the DLIS Amendment, Alternative 2 would recommend that the State focus its investments in levee improvements at high-risk areas and on benefits to Delta ecosystems. Alternative 2 would achieve or partially achieve many of the DLIS Amendment objectives.

However, it would not meet the DLIS objective related to prioritizing investments that protect water conveyance and diversion infrastructure because of the alternative's decreased emphasis on funding these priorities.

Alternative 2 would promote the construction of below-ground conveyance facilities to help manage water flow conditions in the Delta for fisheries and the development of surface and groundwater storage both within the Delta watershed and in areas that use water exported from the Delta. Unlike the Project, improvements to through-Delta conveyance and construction and operation of other new intake and conveyance facilities in the Delta would not be promoted. As a result, while Alternative 2 would achieve or partially achieve many of the CSO Amendment objectives, it would not necessarily achieve all of the conveyance-related CSO objectives in the Delta due to the lack of promotion of improved through-Delta conveyance facilities and new intake and conveyance facilities in the Delta.

As to the PM Amendment, Alternative 2 would modify select performance measures to reflect an emphasis on wetland habitat restoration. Alternative 2 would achieve all of the PM Amendment objectives.

Overall, Alternative 2 achieves or partially achieves most of the project objectives, though not to the same degree as the Project; it would not meet the DLIS objective related to prioritizing investments that protect water conveyance and diversion infrastructure; and it would not necessarily achieve all of the conveyance-related CSO objectives in the Delta.

For the foregoing reasons, Alternative 2 is hereby rejected.

C. Alternative 3: Through-Delta Conveyance Emphasis

Alternative 3 focuses on improvements to water conveyance through the Delta by a combination of actions that would modify existing water conveyance infrastructure, construct new water conveyance infrastructure, and develop additional groundwater and surface water storage to support management of inflows to the Delta. Alternative 3 differs from the Project in that it does not promote construction and operation of new isolated conveyance facilities in the Delta.

Construction and operation impacts associated with Alternative 3 would be less severe than the Project in the Primary Planning Area because the alternative would not promote construction and operation of new isolated conveyance facilities in the Delta. As a result, there would be less of a change in visual character, introduction of fewer uses that could conflict with land use policies, and potentially less conversion of agricultural and forestland to other uses. Similarly, due to decreased construction, Alternative 3 may have fewer short-term conflicts with applicable air quality plans, fewer noise impacts, and fewer groundborne vibration impacts. With reduced conveyance-related construction activity, there would be a reduced likelihood of adverse impacts to special status species and their habitat, sensitive natural communities, wildlife migratory corridors, and geology and soils impacts. Reduced construction would also decrease impacts related to: pollution of surface and groundwater, reduced water supply, and increased surface runoff likely to overwhelm stormwater drainage systems and/or cause flooding. The reduced risk of construction-induced floods would also reduce the exposure of people or structures to a significant risk of loss, injury, or death from flooding, including flooding as a result of levee or

dam failure, and would reduce the risk of inundation by seiche. Finally, reduced construction activities would reduce direct impacts to recreation, transportation, utilities, and public services in the Primary Planning Area compared to the Project.

Impacts in the Extended Planning Area would be similar to the Project. Hydrology and water quality operational impacts of Alternative 3 potentially could be more severe in the Extended Planning Area compared to the Project because, without isolated conveyance facilities in the Delta, the water supply benefits of infrastructure improvements included in this alternative would be less significant. For example, increased storage north of the Delta would be less effective in offsetting the impacts of increased instream flow objectives without isolated conveyance to move water supplies south of the Delta when available. The net impact of the project, therefore, could be greater on water supply for users of Delta water and groundwater under Alternative 3 compared to the Project.

Alternative 3 would recommend that the State focus its investments in levee improvements at islands or tracts identified as having a high risk to life or property and to water supply. Unlike the Project, it would not include new recommendations to focus State investments on levee improvements that would specifically benefit ecosystems. As a result, while Alternative 3 would contribute or partially contribute to many of the DLIS Amendment objectives, it would not meet the DLIS objective related to prioritizing investments in ecosystem enhancements that provide high benefits because of the Alternative's decreased emphasis on funding other State interests.

With respect to the CSO Amendment, Alternative 3 would promote modification of existing water conveyance infrastructure in the Delta; construction of new or modified conveyance facilities outside of the Delta; and construction and operation of new intake and conveyance facilities in the Delta that may be used to protect native fish and (1) improve the quality and reliability of water supplies delivered via the North Bay Aqueduct and/or (2) increase operational flexibility for local, SWP, and CVP municipal and environmental water supplies conveyed from the South Delta. Unlike the Project, Alternative 3 does not promote construction and operation of new isolated conveyance facilities in the Delta. Alternative 3 contains portions of the Project that would contribute or partially contribute to many CSO Amendment objectives. However, because Alternative 3 does not promote new isolated conveyance in the Delta, it would only partially contribute to conveyance objectives related to enhancing the Delta ecosystem and restoring more natural flows, increasing the reliability of water available for export, protecting or enhancing Delta water quality, improving the resiliency of the State's water supply system, or being able to adapt to changing hydrologic conditions in the Delta while continuing to provide benefits to the ecosystem and reliably conveying available water supplies. Sea level rise is expected to increase salinity in the Delta, and changing climate conditions will affect reservoir storage and releases needed to meet water quality objectives in the Delta; compared to the Project, it would be more difficult under Alternative 3 to improve the reliability of supplies exported from the Delta under these changing conditions.

As to the PM Amendment, performance measure 4.2 would be modified to include metrics and monitoring locations for Central Delta flows, recognizing the importance of flows on Central Delta water quality. Alternative 3 would achieve all of the PM Amendment objectives.

Overall, Alternative 3 achieves or partially achieves most of the project objectives, though not to the same degree as the Project, and it would not meet the DLIS objective related to prioritizing investments in ecosystem enhancements that provide high benefits. Additionally, Alternative 3 could have more severe environmental effects than the Project in some resource areas.

For the foregoing reasons, Alternative 3 is hereby rejected.

D. No Project Alternative

CEQA requires consideration of a no project alternative. Consistent with the State CEQA Guidelines, the No Project Alternative assumes the continuation of existing plans and policies. For example, the No Project Alternative assumes the Council would take no action to amend the Delta Plan to address Delta levee investments in risk reduction; conveyance, storage, and the operation of both; or performance measures. The existing Delta Plan, as approved by the Council in 2013 and amended in 2016, would continue to be in effect and implemented. The coequal goals would continue to be implemented into the foreseeable future, and projects initiated by other public agencies to implement the Delta Plan are assumed to continue to be implemented.

Construction and operation impacts associated with the No Project Alternative would be similar to the Project in the Primary Planning Area and Extended Planning Area because the Delta Plan encourages activities by other public agencies similar to the Project. As a result, construction and operation of these types of projects could result in significant and unavoidable environmental impacts similar to those described above for the Delta Plan Amendments.

There are no impacts identified for the No Project Alternative as being either less severe or more severe than the Project.

The No Project Alternative would not achieve all of the project objectives. The No Project Alternative consists of the current Delta Plan, which achieves the coequal goals and eight inherent objectives in the Delta Reform Act (see Chapter 2 Delta Plan Background), and contributes to the Delta Plan Amendments project objectives. For example, the Delta Plan includes policies and recommendations that achieve or partially achieve the DLIS Amendment objectives related to protecting life and property; discouraging the use of State funding to assist further urbanization of flood-prone Delta lands; expending funds to reduce risk; prioritizing investments that protect urban areas first; and taking into account the Delta's unique values. However, it may take longer or be more difficult to achieve the project objectives absent the DLIS Amendment's revised prioritization of levee improvements and other recommendations related to levee information management, operation and maintenance funding, emergency preparedness and recovery, and hazard reduction. The Delta Plan contributes to achievement of the CSO Amendment objectives, but does not reflect the selection of California WaterFix by the Department of Water Resources (DWR) as its preferred alternative, rather than BDCP, and the approval of California WaterFix by DWR in July 2017. Existing performance measures also achieve or partially achieve many of the PM Amendment objectives. In summary, the No Project Alternative partially achieves some, but not all, of the project objectives of the Project.

For the foregoing reasons, the No Project Alternative is hereby rejected.

E. Environmentally Superior Alternative

On the basis of the analyses in the PEIR, the Council finds that Alternative 2, the Delta Wetland Restoration Emphasis, is the environmentally superior alternative. Alternative 2 would result in similar but less severe impacts compared to the Project. Alternative 2 would have lesser impacts than Alternative 1, and Alternative 2 would have lesser hydrology and water quality impacts than Alternative 3. Thus, Alternative 2 is the environmentally superior alternative.

In the Primary Planning Area, implementation of projects in response to Alternative 2 would result in similar but less severe impacts compared to the Project, because improvements to through-Delta conveyance and construction and operation of other new intake and conveyance facilities in the Delta would not be promoted. Therefore, less construction activity overall would occur in the Delta, and impacts associated with construction activity, such as impacts to aesthetics, air emissions, biological resources, noise, and transportation and traffic would be less severe than the Project. Mitigation measures identified for the Project would minimize the potential significant impacts for Alternative 2. However, similar to the Project, because the exact location and extent of projects that would be undertaken by other public agencies to implement the proposed amendments under Alternative 2 are not known at this time, construction-related impacts would still be considered significant and unavoidable. Impacts of implementing projects by other agencies in the Extended Planning Area in response to Alternative 2 would be the same as those identified for the Project because the same level of construction and operational activities would be undertaken.

X. STATEMENT OF OVERRIDING CONSIDERATIONS

As discussed above, the Council has found that some of the impacts of the Delta Plan Amendments remain significant following adoption and implementation of mitigation measures described in the PEIR and incorporated into the Project. Section 15093(b) of the State CEQA Guidelines provides that when the decision of the public agency results in the occurrence of significant impacts that are not avoided or substantially lessened, the agency must state in writing the reasons to support its actions. Having balanced the benefits of the Project against its significant and unavoidable environmental impacts, the Council finds that the Project's benefits outweigh its unavoidable adverse environmental effects, and that the adverse environmental effects are therefore acceptable. The Council further finds that each of the Project benefits discussed below is a separate and independent basis for these findings. The reasons set forth below are based on the Final PEIR and other information in the administrative record.

1. The Council is charged with developing a legally enforceable, long-term management plan for the Delta that furthers achievement of the coequal goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place.

2. The Delta is currently in crisis, as it cannot satisfy all of the competing demands placed on it, including those related to water supply, habitat, agriculture, recreation, and flood protection. Key species are endangered or threatened, the amount of water that can be exported from the Delta is determined by legal orders protecting species in addition to variable

precipitation and storage, and experts warn that the Delta poses one of the greatest flood risks in the West.

3. The 45,600 square mile Delta watershed provides all or a portion of surface water or groundwater supplies to 27 million California residents. Approximately 8 percent of the State's water supply is exported from the Delta.

4. The Delta and Suisun Marsh support more than 55 fish species and more than 750 plant and wildlife species. Of these, approximately 100 wildlife species, 140 plant species, and 13 taxonomic units of fish are considered special status species.

5. The Delta and Suisun Marsh are home to more than one-half million residents living in dozens of communities, including portions of 12 incorporated cities, and support more than 146,000 jobs.

6. Approximately 57 percent of the Delta and Suisun March (more than 480,000 acres of agricultural land) currently supports a highly productive agricultural industry that is valued at hundreds of millions of dollars annually.

7. The Delta and Suisun Marsh levees and lands support interstate and state highways and railroad tracks that support interstate and intrastate traffic, more than 500 miles of major electrical transmission lines, 60 substations, and more than 400 miles of major natural gas pipelines that provide energy throughout Northern California, as well as critical pipelines that carry transportation fuels to airports and other fuel depots throughout the San Francisco Bay Area and Sacramento.

8. The Delta and Suisun Marsh have more than 1,335 miles of levees that protect more than 800,000 acres of land and play a role in the water supplies conveyed through the Delta.

9. The Delta experiences more than 12 million visitor days annually from recreational boaters; fishing, hunting, bird watching and camping draw even more visitors to the area.

10. The Delta Plan and the Delta Plan Amendments will advance California's interest in furthering achievement of the coequal goals and their inherent objectives of promoting statewide water conservation and water use efficiency, improving water quality, improving water conveyance, expanding statewide water storage, and reducing risks to people, property, and state interests by effective emergency preparedness, appropriate land uses, and investments in flood protection.

11. Tradeoffs and integration define the Delta dilemma: water conveyance facilities that built strong urban and agricultural economies threaten ecosystem health. Water that is beneficial for fish is alive with plankton and organic material, but sources of drinking water are best in as pure a form as possible. The pollutants of upstream urban and agricultural uses cause problems for downstream fish and water diverters alike. The same oceangoing ships that opened the Central Valley to world trade also introduced nonnative species that alter the Delta ecosystem. High water flows that historically improved habitat and a diverse food web come

with the threat of lost homes, flooded farmland, and disaster for Delta residents and the California economy. Adding to the complexity of these problems is the increasing volatility of Delta water supplies. Without the solutions encouraged by the Delta Plan and the Delta Plan Amendments, these problems will not simply continue to exist at their current level, but will get worse over time.

12. The projects and actions needed to further achievement of the coequal goals and inherent objectives will create significant environmental impacts in the short term related to project construction in order to mitigate future, more severe environmental impacts and to achieve long-term improvements to the environment, including more efficient use of water and increased water supplies, adaptive management of water supplies that balances a healthy ecosystem and multiple beneficial uses, improved water quality, improved wildlife habitats and land for agriculture and recreation, and improved protection from flooding risk in order to preserve existing land uses and agriculture.

13. The Delta Plan and the Delta Plan Amendments build on years of planning efforts and incorporate actions, recommendations, and strategies developed by both governmental and nongovernmental entities that have invested countless hours on Delta issues and have specialized expertise.

14. The Delta Plan and Delta Plan Amendments lay the groundwork for near-term actions for improvement and focus on the immediate avoidance of further harm or increased risk to the Delta by highlighting urgently needed habitat projects and the significant potential for local and regional water supply development. The Delta Plan seeks to immediately halt practices known to be detrimental to the sustainability of the Delta's many functions and services.

15. The Delta Plan and Delta Plan Amendments will improve water supply reliability by encouraging users that rely on water from the Delta watershed to invest in new and improved regional supplies, conservation, storage, and water use efficiency in order to decrease their reliance on diversions from the Delta and increase operational flexibility when such diversions may be necessary. This will result in a statewide water supply that is less vulnerable to drought and other natural disasters, more resilient in the event of earthquakes and sea level rise, and less subject to regulatory uncertainty. The economies of major regions of the state rely upon the ability to use water within the Delta watershed and water diverted from the Delta and its watershed. Thus, improved predictability of deliveries is essential to the state's economic interest. Many of these water users also will benefit from improvements to the quality of water diverted from the Delta

16. The Delta Plan and Delta Plan Amendments will improve water supply reliability, water quality, operational flexibility, and ecosystem benefits through the promotion of options for the design and implementation of new and improved water conveyance, water storage, and the operations of both. This includes the promotion of a dual conveyance option combining through-Delta and isolated conveyance; the evaluation, design, and implementation of new or improved conveyance or diversion facilities in the Delta; options for new or expanded groundwater and surface water storage; and the operation of new or improved conveyance and diversion facilities outside of the Delta. The promotion of these options will result in increased water supply reliability; greater flexibility in storing water supplies during periods when more

water is available for carryover into drought periods, which will reduce reliance on the Delta for water supply during dry and critically dry years; and greater operational flexibility to adapt to changing conditions.

17. The Delta Plan and Delta Plan Amendments will protect, restore and enhance the Delta ecosystem by encouraging a more natural flow regime through the Delta; promoting the restoration of important, interconnected habitat for birds and terrestrial wildlife; and reducing impacts from stressors such as invasive species and poor water quality. These improvements will benefit not only species and habitats, but also coastal and inland commercial and recreational fisheries, recreation and tourism in the Delta, and the California public as a whole.

18. The Delta Plan and Delta Plan Amendments will protect and enhance the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place by conserving farming and rural land use through appropriate planning for urban land uses, protecting the unique character of historic Delta communities, and allowing for development that supports agricultural and recreation-related economic activities. The Delta Plan seeks to minimize conflicts with and between existing or planned land uses in the Delta and water management, ecosystem restoration, or flood management infrastructure. The Delta thus will retain its rural heritage and status as a place where agricultural, recreational, and environmental uses are uniquely integrated, and it will continue its important role in the regional economy.

19. The Delta Plan and Delta Plan Amendments will reduce risks to people, property, and state interests in the Delta by encouraging effective emergency preparedness, appropriate land uses, and investments in flood protection. Specifically, the DLIS Amendment provides funding priorities to guide discretionary State investments in Delta flood risk management as required by Water Code section 85306. The DLIS Amendment identifies State interests in the Delta that are vulnerable to flooding, defines principles to guide the development and refinement of policies and recommendations, and evaluates risks to State interests from flooding. Additionally, the Amendment will continue to improve emergency preparedness and response capabilities with respect to flood emergencies by stockpiling materials in appropriate locations for post-disaster repairs, improving and modernizing levee information management, and funding levee maintenance and improvements at very-high-priority islands and tracts. The Delta Plan also provides funding priorities to guide discretionary State investments in the extension of flood-proofing at a 100-year level of flood protection plus additional freeboard for sea level rise to rural development in the Delta and the restriction of encroachments in floodways and designated floodplains. This would reduce risks of natural disaster within the Delta, thereby encouraging investment in local communities and business; protecting agricultural production and investment; allowing for diversification and expansion of value added activities such as crop distribution and processing facilities; and minimizing flood related losses and disaster response costs.

20. The Delta Reform Act requires that the Delta Plan be based on the best available science and requires the use of science-based, transparent, and formal adaptive management strategies for ongoing ecosystem restoration and water management decisions. The Delta Science Plan, completed in 2013 and updated in 2016, strengthens and unifies the Delta science community; assures the credibility, relevance, and legitimacy of Delta science; and provides tools, organizational structures, and mechanisms for scientists, policymakers, managers,

stakeholders, and the public to help them more effectively collaborate on turning Delta science into effective action.

21. The Delta Plan and the Delta Plan Performance Measures Amendment contain quantified or otherwise measurable targets to be used as indicators of whether the Delta Plan is meeting its objectives. The performance measures support the achievement of all of the goals and objectives of the Delta Plan by enhancing the Council's ability to accurately gauge current conditions and the effects and effectiveness of agency projects and other actions.

22. As authorized by the Delta Reform Act, pursuant to the Delta Plan the Council will coordinate and collaborate across the multiple public agencies that have responsibility for some aspect of the Delta. The Delta Plan establishes an open and accountable governance mechanism for coordinating actions across agency jurisdictions and statutory objectives in order to halt the decline of the Delta ecosystem and improve water supply reliability.

23. When compared to the alternatives analyzed in the Final EIR (including the No Project Alternative), the Delta Plan Amendments provide the best available balance between maximizing attainment of the project objectives and minimizing significant environmental impacts.

XI. INCORPORATION BY REFERENCE

These findings incorporate the text of the Final Program Environmental Impact Report for the Delta Plan Amendments, the Delta Plan, and the Mitigation Monitoring and Reporting Program by reference and in their entirety. Without limitation, this incorporation is intended to elaborate on the scope and nature of mitigation measures, the basis for determining the significance of impacts, the comparative analysis of alternatives, the determination of the environmentally superior alternative, and the reasons for approving the Project in spite of the potential for associated significant and unavoidable adverse impacts.

XII. RECIRCULATION NOT REQUIRED

No significant new information was added to the Draft PEIR as a result of the public comment process. The Final PEIR responds to comments, and clarifies, amplifies, and makes insignificant modifications to the Draft PEIR. It does not identify any new significant effects on the environment or a substantial increase in the severity of an environmental impact requiring major revisions to the Draft PEIR. Therefore, recirculation of the PEIR is not required.

XIII. RECORD OF PROCEEDINGS

Various documents and other materials related to the Delta Plan Amendments Project constitute the record of proceedings upon which the Council bases its findings and decisions contained herein. Those documents and materials are located in the offices of the custodian for the documents and materials, which is Lita Brydie, Clerk of the Board, Delta Stewardship Council, located at 980 Ninth Street, Suite 1500, Sacramento, California 95814.

XIV. SUMMARY

A. Based on the foregoing Findings and the information contained in the record, the Council has made one or more of the following Findings with respect to each of the significant environmental effects of the Delta Plan Amendments:

1. Changes or alterations have been required in, or incorporated into, the Delta Plan Amendments that avoid or substantially lessen the significant environmental effects identified in the Final PEIR.
2. Those changes or alterations are wholly or partially within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other public agency.
3. Specific economic, legal, social, technological, or other considerations, make infeasible the mitigation measures or alternatives identified in the Final PEIR that would otherwise avoid or substantially lessen the identified significant environmental effects of the Project.

B. Based on the foregoing Findings and the information contained in the record, the Council determines that:

1. All significant effects on the environment due to the approval of the Delta Plan Amendments have been eliminated or substantially lessened where feasible.
2. Any remaining significant effects on the environment found to be unavoidable are acceptable due to the factors described in the Statement of Overriding Considerations in Section X, above.